LATVIJAS UNIVERSITĀTES BIOLOĢIJAS INSTITŪTS
LATVIJAS UNIVERSITĀTES
ĢEOGRĀFIJAS UN ZEMES ZINĀTŅU FAKULTĀTES
BIOĢEOGRĀFIJAS LABORATORIJA

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ENGURES EZERA DABAS PARKA FLORAS ATLANTS

VASKULĀRIE AUGI

Atlantu tehniski sagatavoja *Viesturs Laiviņš, Kristīne Sončika*

LATVIJAS VEĢETĀCIJA

10

RĪGA 2005

Latvijas Veģetācija, 10, 2005
Iespiests SIA P&Ko

ISSN 1407-3641

SATURS

PRIEKŠVĀRDS

Engures ezers un tā apkārtne dabaszinātniekiem sen ir zināma kā Latvijā un Eiropā nozīmīga putnu vieta. Pirmās ziņas par putniem šajā apkārtnē publicētas pirms vairāk nekā 100 gadiem, bet plaši sistemātiski ornitoloģiski pētījumi tiek veikti pēdējos 50 gados, un tagad par Engures ornitofaunu ir publicēti vairāki desmiti apkopojošu zinātnisku rakstu un monogrāfiju. Lai saglabātu un pētītu ornitoloģiski nozīmīgo teritoriju, tā tiek īpaši aizsargāta. 1957. gadā izveidots Engures ezera ornitoloģiskais liegums (te sāk darboties LU Bioloģijas institūta Ornitoloģisko pētījumu centrs), 1977. gadā tam noteikta arī buferzona ap ezeru; vēlāk šai teritorijai vēl pievienota pieguloša Rīgas jūras līča akvatorija (līdz 10 m dziļumam), kā arī jūrmalas pļavas un kāpas pie Mērsraga. Kopš 1998. gada ezers un tā apkārtne ir īpaši aizsargājama dabas teritorija – Engures ezera dabas parks; tā kodols ir Engures ezers (40.5 km^2), parka kopplatība ir 199.9 km^2.

Engures ezera dabas parks ir bioloģiski daudzveidīga teritorija; tajā ir ne vien bagāta un savdabīga putnu fauna, bet ir arī daudzveidīga flora un veģetācija (876 vaskulāro augu sugas; 84 no tām ir Latvijas Sarkanās grāmatas sugas un ar likumu īpaši aizsargājamas sugas), savdabīgs biotopu sastāvs u.tml. Kopš 1995. gada Engures ezera dabas parks un Engures ezera baseins ir Latvijas Zinātnes padomes (LZP) finansētās programmas *Latvijas ekosistēmu bioloģiskie resursi un to apsaimniekošanas optimizēšana* pētījumu modeļteritorija. Kopš 2002. gada pētījumi tiek turpināti LZP sadarbības projekta *Latvijas dabas biodaudzveidība un ekosistēmu racionāla attīstība* ietvaros. Kopš 2004. gada šī teritorija ir iekļauta Latvijas Nacionālajā ilgtermiņa ekoloģisko pētījumu tīklā, kas ir globālā starptautiskā Ilgtermiņa ekoloģisko pētījumu tīkla (International Long-term Ecological Research (ILTER) Network) sastāvdaļa; mērķis ir ilglaicīgi integrēti ekoloģiskie un vides pētījumi teritorijas ilgspējīgas attīstības kontekstā, un floras dati ir ekoloģiskā bloka prioritāra sastāvdaļa.

Fragmentāras ziņas par Engures floru un veģetāciju atrodamas K. Kupfera, Z. Spura, G. Sabardinas, M. Pakalnes, B. Laimes, E. Zviedres u.c. publikācijās. Sistemātiska un detalizēta Engures ezera un tā apkārtnes floras izpēte sākas 20. gs. 80. gados. Ilgstošus pētījumus te veikusi G. Gavrilova, datu reģistrēšanai lietojot topogrāfiskās kartes ar sistemātisku taisnstūru tīklu, kas ļauj informāciju fiksēt noteiktā ģeogrāfisko koordinātu sistēmā un veidot sugu izplatības kartes. Pētījumu rezultāti atspoguļoti vairākās publikācijās, kurās ir Engures ezera dabas parka vai tā daļu vaskulāro augu floras saraksti.

Šajā izdevumā atlantā sakopotas Engures ezera dabas parka vaskulāro augu sugu izplatības kartes. Tās veidotas, izmantojot visus pieejamos dažādu gadu pētījumu datus. Domājams, ka atlantā apkopotā informācija par Engures ezera dabas parka vaskulāro augu floru būs vērtīgs pamats turpmākiem pētījumiem, kā arī vides un augāja transformācijas ilgtermiņa novērojumiem. Dabas parks atrodas Baltijas jūras piekrastē, aktīvā augu sugu dabiskās un antropogēnās migrācijas zonā. Veicot atkārtotus pētījumus, precīzi parādīsies pārmaiņas sugu izplatībā; tajās atspoguļosies arī vides transformācija lokālā (Engures ezera dabas parks) un

reģionālā (Piejūras zemiene, Kurzeme) līmenī, kā arī bioģeogrāfisko procesu dinamika jūras piekrastē. Engures ezera dabas parks tā kļūst arī par modeļteritoriju floras ilgtermiņa izmaiņu pētījumiem Latvijā.

Lietojot mūsdienu ģeogrāfisko informācijas sistēmu tehnoloģijas, turklāt ir iespējama arī plaša kvantitatīva analīze: gan par augu taksonu izplatību (sastopamība, indivīdu daudzums teritorijā u.c.), gan arī par floras parametru saistību ar vides faktoriem (augtenes mitrums, reakcija, barības vielu saturs u.c.), ar biotopu sastāvu u.tml.

Visbeidzot, Engures ezera dabas parka vakulāro augu sugu floras atlantu var izmantot kā sākummateriālu, veidojot Latvijas floras atlantu, jo ņemot par pamatu atsevišķu aizsargājamo teritoriju (dabas liegumi, dabas rezervāti u.c.) datu bāzes un atlantus, kā arī tematiskas sugu izplatības kartes (invazīvās un agresīvās sugas, nezāles u.c.), ir iespējams veidot reģionālos atlantus, kā arī vienotu valsts floras atlantu. Hierarhiskā tīklojuma sistēma dod iespēju floras datu bāzi un kartogrāfisko materiālu viegli integrēt citos tīklojuma līmeņos (1 x 1 km, 5 x 5 km, 10 x 10 km u.c.).

M. Laiviņš, V. Melecis

ATLANTA VEIDOŠANA

Floras inventarizācijas principi dabas teritorijās

Dabas teritoriju izpētes svarīgāko pētījumu kopā ietilpst pēc iespējas pilnīgāka augu un dzīvnieku taksonu saraksta sastādīšana. Šādi inventarizācijas materiāli raksturo teritorijas bioloģisko dažādību un ir priekšnoteikums plašākiem ekosistēmu pētījumiem.

Aizsargājamo dabas teritoriju sugu sastāva izpētē var nodalīt trīs saistītus inventarizācijas līmeņus, kas atšķiras pēc detalizācijas pakāpes (Лайвиньш 1987). Pirmais, vienkāršākais un izplatītākais floras inventarizācijas paņēmiens ir sugu saraksta veidošana. Latvijā pēdējos 40 gados vaskulāro augu sugu saraksti ir sastādīti ap 50 aizsargājamām dabas teritorijām (ieskaitot ezeru salas).

Otrais, mazliet darbietilpīgāks līmenis ir sugu uzskaite pa augu sabiedrībām (biotopiem). Tad teritorijas floru raksturo cenofloru (piemēram, priežu sils, liepu gārša, pļavas auzenes pļava, grīšļu purvs u.c.) kopa. Latvijā cenofloru struktūra analizēta septiņiem botāniskajiem liegumiem (Gavrilova, Laiviņš 1992). Cenofloru analīze ir svarīga, piemēram, floroģenēzes pētījumos, izzinot reģiona floras savdabību (piesātinājums ar augu sugām, reto un aizsargājamo sugu īpatsvars u.c.), analizējot augāja antropogēnās transformācijas (svešzemju sugu īpatsvars augu sabiedrībās u.c.) u.tml.

Trešais, pilnīgākais floras inventarizācijas līmenis ir augu sugu izplatības karšu izveidošana un sakopošana floras atlantā. Dažāda lieluma teritoriju (reģionālais un lokālais līmenis) floras kartēšanā Latvijā lieto noteikta lieluma hierarhisku, ar ģeogrāfiskām koordinātēm saistītu tīklojuma sistēmu jeb kvadrātu (taisnstūru) režģi (Табака и др. 1977; Laiviņš, Krampis 2004; Лайвиньш 1983).

Tīklojuma izmēri ir atkarīgi no pētāmās teritorijas platības; lietojot dažāda izmēra tīklojumu, mainās arī taksona atradnes lielums. Katrai atradnei ir noteiktas ģeogrāfiskās koordinātes; šāda stingra piesaiste ir ērta, veicot atkārtotus pētījumus, kā arī floras monitoringā. Svarīgi, ka datus par augu sugu izplatību ir iespējams analizēt kvantitatīvi, iegūstot objektīvu pārskatu par sugu sastopamību, indivīdu daudzumu, telpisko struktūru un citiem rādītājiem.

Līdz šim, lietojot kvadrātu tīklojumu, ir izveidots vaskulāro augu sugu atlants Indzera ezera salām (Stradu, Liepu un Cepurītes sala) (Laiviņš et al. 1983; Лайвиньш и др. 1984) un izplatības kartes 133 Moricsalas vaskulāro augu sugām (Лайвиня 1987). Šīs ezeru salas ir nelielas; tīklojums nav veidots topogrāfiskajās kartēs, bet nospraužot piketu tīklu dabā, tādēļ katrai salai ir sava tīklojuma sistēma (10 x 10 m; 20 x 20 m; 25 x 25 m).

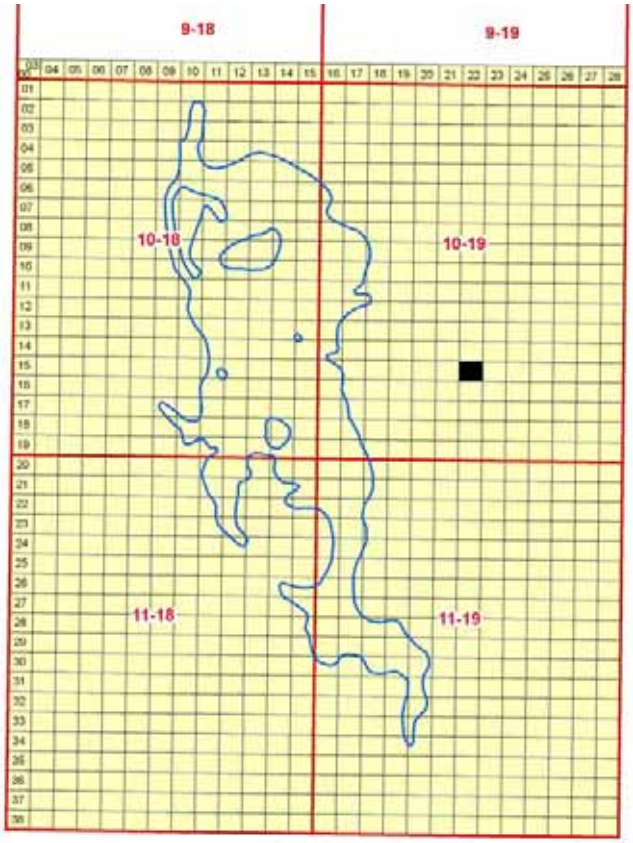
Lauka pētījumi

Vaskulāro augu flora Engures ezera dabas parkā sistemātiski ir pētīta 20. gs. 80. gados (Gavrilova 1990). No 1983. gada līdz 1989. gadam veikti detalizēti pētījumi toreizējā Engures ezera ornitoloģiskajā liegumā un tā buferzonā (Gavrilova 1999; Gavrilova, Baroniņa 2000). Veidojot floras sarakstu un atlantu, 80. gadu dati papildināti ar vēlāk epizodiski veikto pētījumu materiāliem, kā arī ar literatūrā un herbārijos atrodamajām ziņām. Pašlaik dabas parka floras sarakstā ir 876 vaskulāro augu sugas; dažām sugām, kuras sarakstā ierakstītas pēc literatūras datiem, nav zināma precīza atradne, tāpēc tās nav iekļautas atlantā. Jāpiezīmē, ka atlantā nav datu par dabas parka jūras akvatoriju un jūrmalas kāpu joslu pie Mērsraga, jo šīs teritorijas nav pētītas.

80. gados floras inventarizācija veikta, izmantojot topogrāfiskās kartes ar sistemātisku taisnstūru tīklu, kas ļauj datus fiksēt ģeogrāfisko koordinātu sistēmā un veidot precīzas sugu izplatības kartes (trešais inventarizācijas līmenis). Šāds tīklojums visai Latvijai izveidots uz tā laika PSRS Ģenerālštāba topogrāfiskām kartēm (ģeogrāfisko koordinātu sistēma šajās kartēs saistīta ar Krasovska 1940. gada elipsoidu un Pulkovas 1942. gada atskaites meridiānu) 1 : 25 000 un 1 : 10 000 mērogā (Табака и др. 1977). Tīkla pamatelementa (taisnstūra) izmērs ir 70.7 km^2 (7.6 x 9.3 km), Latvijas teritoriju pārklāj 850 pilni un 64 nepilni taisnstūri (1 : 25 000 mēroga kartes pilna lapa vai tās daļa). Pieskaņojoties pētāmās teritorijas lielumam, tīklojuma pamattaisnstūri var sadalīt mazākos taisnstūros (2.6 x 3.1 un 0.5 x 0.6 km), iegūstot vairākus pakārtotus (hierarhiskus) tīklojuma līmeņus (Лайвиньш 1983). Floras kartēšanai Engures ezera dabas parkā lietots regulārs tīklojums, kur tīkla elements ir 0.5 x 0.6 km (0.30 km^2) un pamatlīmeņa tīkla kvadrāta (1: 25 000 mēroga lapa) 1º (viens grāds) pa X asi (ģeogrāfiskā paralēle) sadalīts 8 vienādās daļās, bet pa Y asi (ģeogrāfiskais meridiāns) – 12 vienādās daļās.

Tīkla numerācija sākas no kreisā augšējā stūra: pirmais cipars apzīmē kvadrāta atrašanās vietu uz Y ass, otrais – uz X ass (1. att.). Datu bāzē taisnstūra numurs satur informāciju gan par pamatlīmeņa (visa Latvija), gan arī par lokālo (Engures ezera dabas parks) tīklojuma sistēmu; piemēram, attēlā izceltā tīkla elementa xxx numurs ir 10-19-15-22, kur 10-19 apzīmē tā vietu pamatlīmeņa (7.6 x 9.3 km) tīklojumā, bet 15-22 – lokālajā (0.5 x 0.6 km) dabas parka tīklojumā.

Engures ezera dabas parka teritoriju pārklāj 594 kvadrāti, 110 no tiem ir nepilni, jo ir uz pētāmās teritorijas robežas. Lauka pētījumos katram kvadrātam aizpildīta veidlapa jeb uzskaites kartīte, kurā alfabēta kārtībā ir ap 950 Latvijā izplatītāko vaskulāro augu sugu akronīmi; retās sugas, kuru nav uzskaites kartītē, tiek pierakstītas atsevišķi.



1. attēls. Engures ezera dabas parka tīklojuma sistēma

(■ – tīklojuma pamatelements xxx)

Datu bāze un datu transformācija tīklojuma sistēmā

Engures ezera dabas parka floras inventarizācijas materiāli uzkrāti datu bāzē (EXCEL). Katrai sugai ir savs fails, kurā katrai sugas atradnei ir šādi atribūti:

- tīkla elementa (taisnstūra) numurs (X un Y koordinātu numerācija);
- vieta (adrese);
- biotops;
- autors;
- avots (uzskaites kartītes numurs, herbārijs, literatūra u.c.);
- gads, kad atradne fiksēta.

Datu bāzes informācija, kas sākotnēji bija PSRS lietotajā 1942. gada koordinātu sistēmā, tagad ir integrēta taisnleņķa hierarhiskajā kvadrātu tīklojuma sistēmā, ko izveidojām 2004. gadā; visa informācija tiek uzglabāta ĢIS datu bāzē. Sistēma izmantojama gan augu, gan dzīvnieku atradņu kartēšanai, gan arī citas ģeogrāfiskās informācijas attēlošanai kartogrāfiski. Tā sastāv no pieciem pakārtotiem (hierarhiskiem) līmeņiem:

- 10 x 10 km kvadrātu tīkls (kvadrāta platība – 10 000 ha);
- 5 x 5 km kvadrātu tīkls (kvadrāta platība – 2 500 ha);
- 1 x 1 km kvadrātu tīkls (kvadrāta platība – 100 ha);
- 0.5 x 0.5 km kvadrātu tīkls (kvadrāta platība – 25 ha);
- 0.1 x 0.1 km kvadrātu tīkls (kvadrāta platība – 1 ha).

2004. gada tīklojuma pamatā ir 1993. gadā Latvijā oficiāli apstiprinātā topogrāfisko karšu sistēma (TKS-93). Tā izveidota plaknē Latvijas koordinātu sistēmā (LKS-92), kur Rīgas meridiāns ir 24º A. g. (mēroga koeficents ir 0.9996, ievērots transversālās projicēšanas Merkatora likums (UTM projekcija)). Trīs tīklojuma līmeņi šajā sistēmā ir identiski TKS-93 līmeņiem (5 x 5 km, 1 x 1 km, 0.5 x 0.5 km); 10 x 10 km un 0.1 x 0.1 km režģi ir atvasināti no 5 x 5 km un 0.5 x 0.5 km tīkla.

Engures ezera dabas parka atlantā lietots taisnleņķa kvadrāta tīklojuma 4. līmenis – 0.5 x 0.5 km, tātad katra kvadrāta (atradnes) izmērs ir 25 ha, un atlanta kvadrāts ir vidēji par 5 ha mazāks nekā 80. gados lauka pētījumos lietotais PSRS Ģenerālštāba topogrāfisko karšu tīklojuma taisnstūris (0.5 x 0.6 km jeb 30 ha). Tāpēc tagadējā tīklojuma sistēmā kvadrātu ir mazliet vairāk. Datu transformācija no vienas atšķirīgās sistēmas otrā tomēr nav absolūti precīza, un jo tālāk no Rīgas meridiāna (24º A. g.) atrodas transformējamais punkts (Engures ezera meridiāns ir 23º 7’ A. g.), jo lielāka ir nesaiste starp abiem tīklojumiem.

Engures ezera dabas parka ĢIS datu bāze un floras atlanta kartes ir izveidotas, lietojot datorprogrammu ArcGIS 8.3 (ražotājs ESRI – Environmental Systems Research Institute, ASV).

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Atlas of the Flora of the Lake Engure Nature Park.
Vascular plants

Ģertrūde Gavrilova
Ilmārs Krampis
Māris Laiviņš

Summary

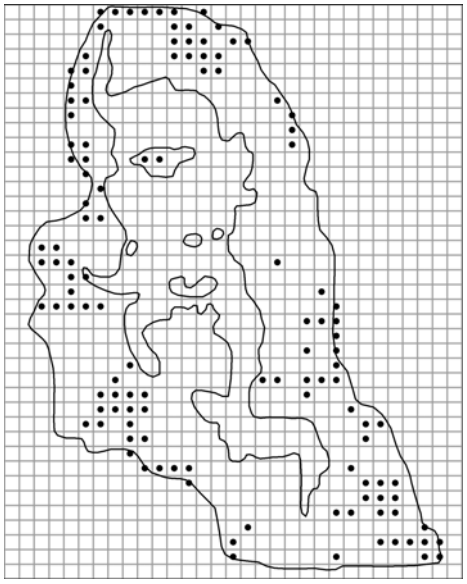
Mapping of flora of the Lake Engure Nature Park was perfomed in 1983-1989 using a 0.5 x 0.6 km grid-net. The grid-net was established on the basis of the Soviet Union military topographical maps in scale 1 : 25 000 and 1 : 10 000.

Plant species data were stored in the Excel data base. Following attributes were used for each species: the number of the grid-net square (value of x and y coordinate), address (locality), habitat type, author, source (the ID number of the species list, herbarium, literature data etc.). Information stored in the data base was further transformed to the grid-net with the cell size of 0.5 x 0.5 km (LKS-92 coordinate system) and stored in a GIS data base.

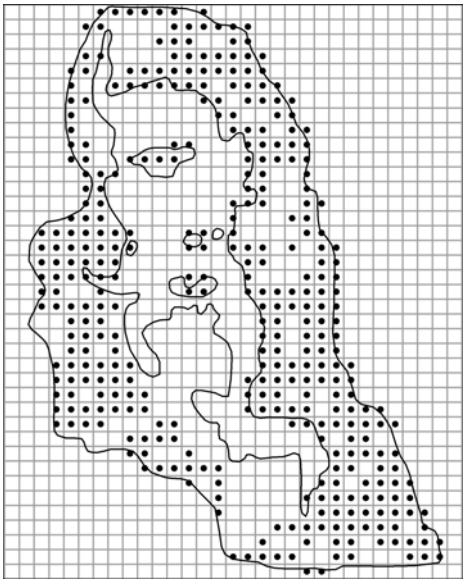
The Flora Atlas contains 854 vascular plant species distribution maps. This information is especially valuable for different biogeographical studies.

VASKULĀRO AUGU SUGU

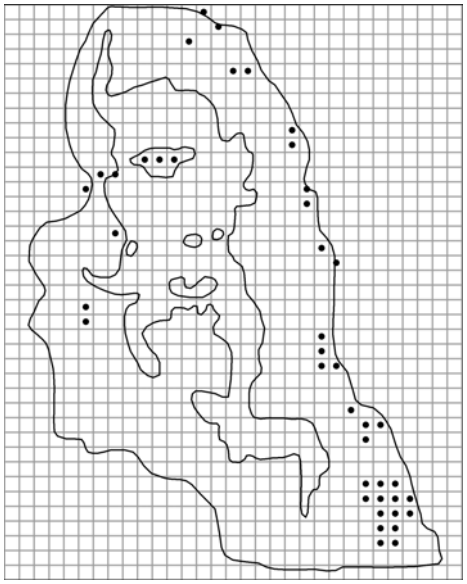
IZPLATĪBAS KARTES



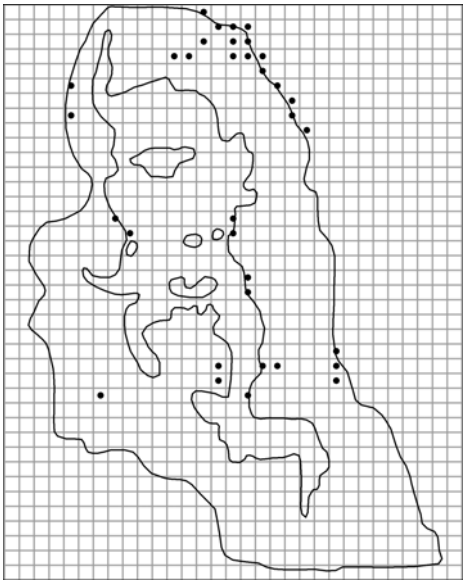
Acer platanoides



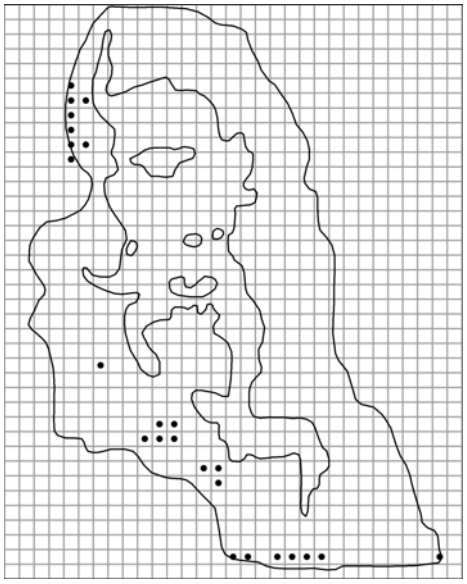
Achillea millefolium



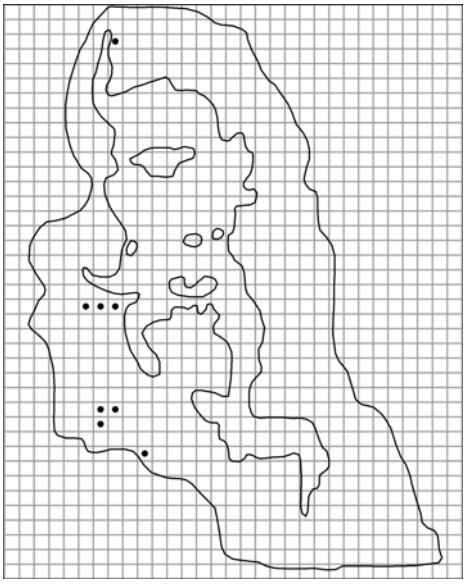
Acinos arvensis



Acorus calamus



Actaea spicata



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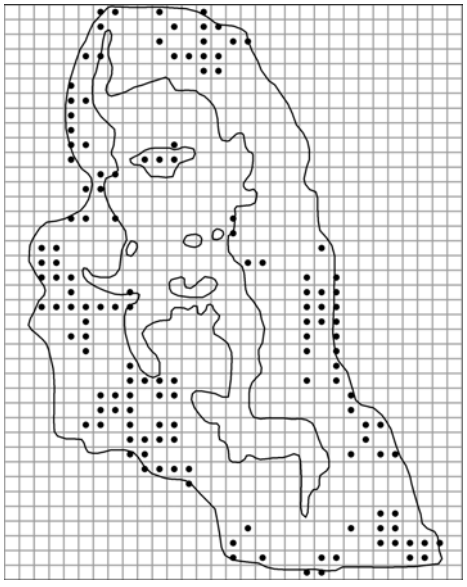

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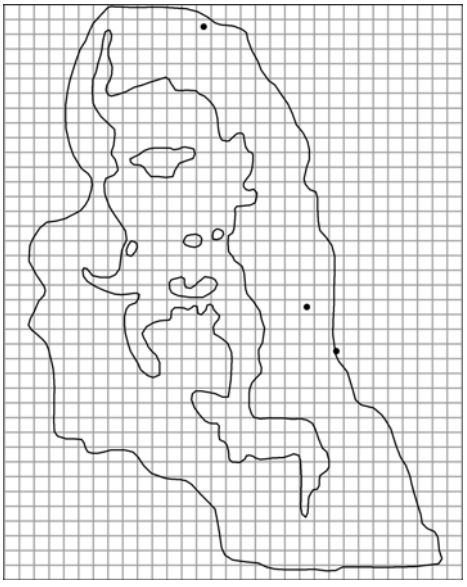

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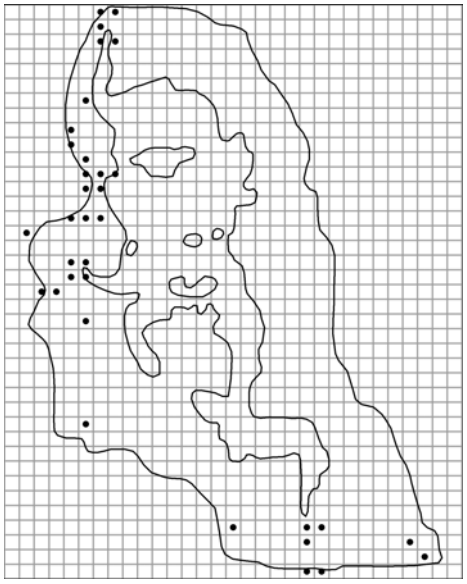

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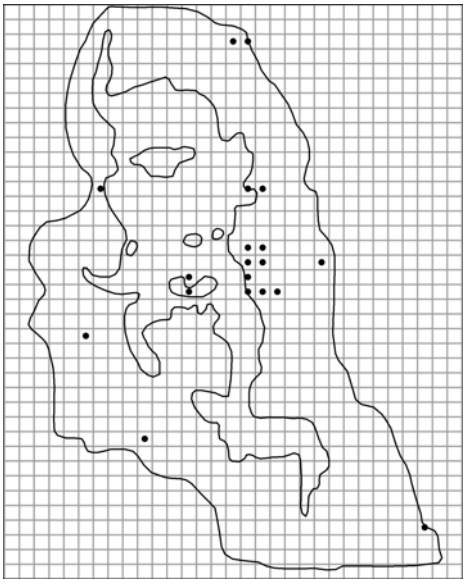
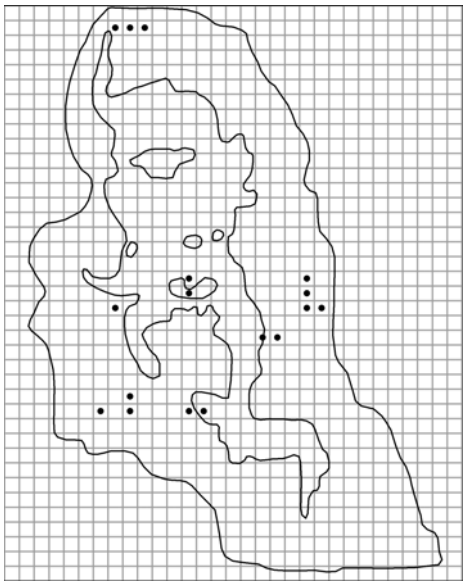


Agrostis canina



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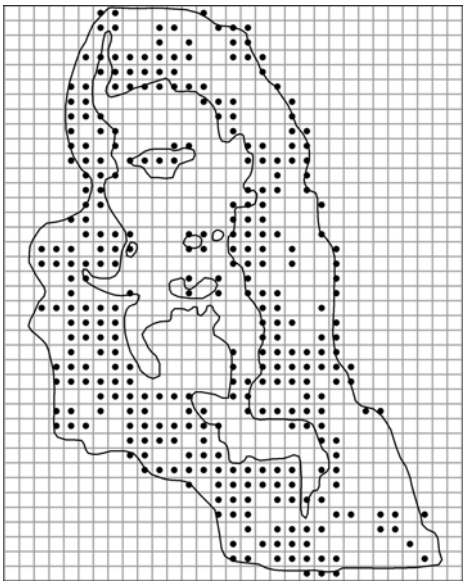

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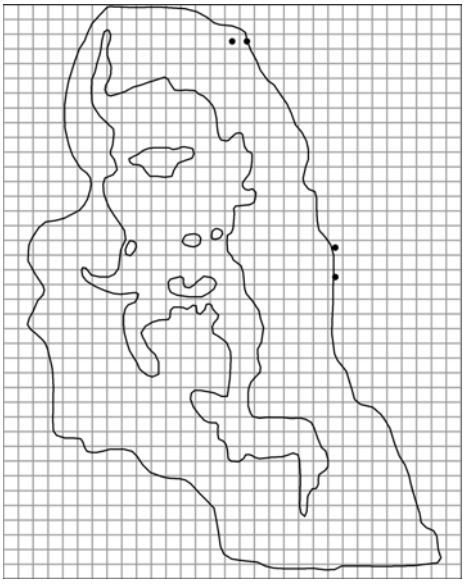

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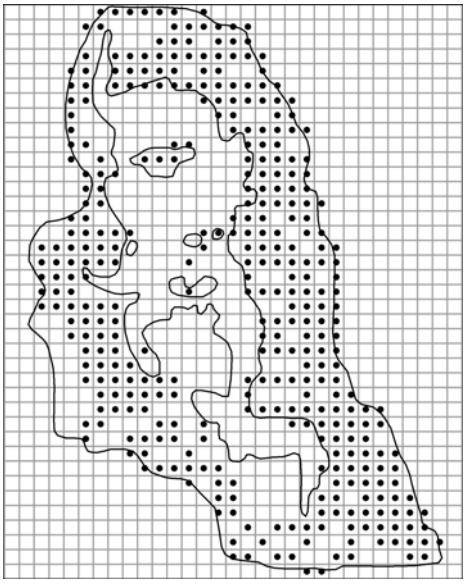

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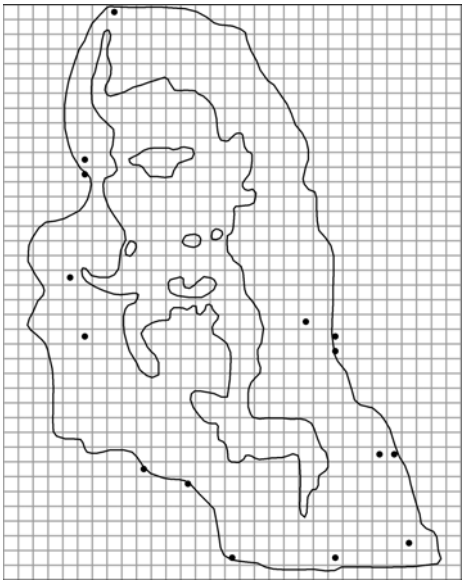
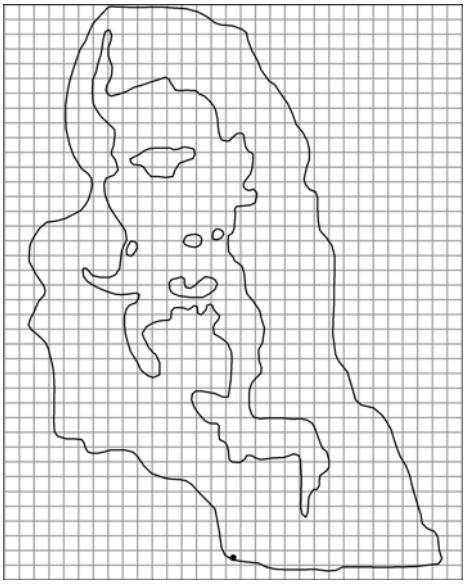
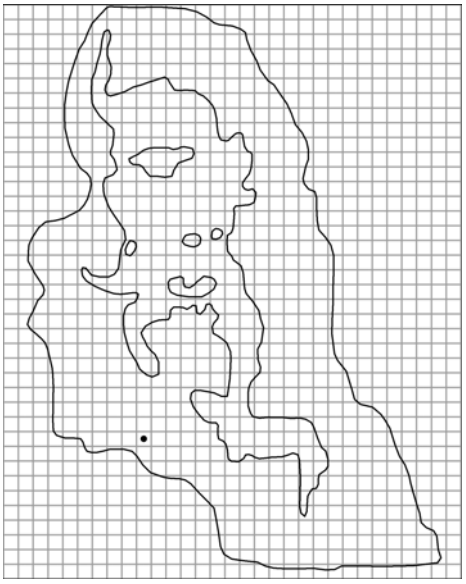


Alchemilla acutiloba



Alchemilla baltica



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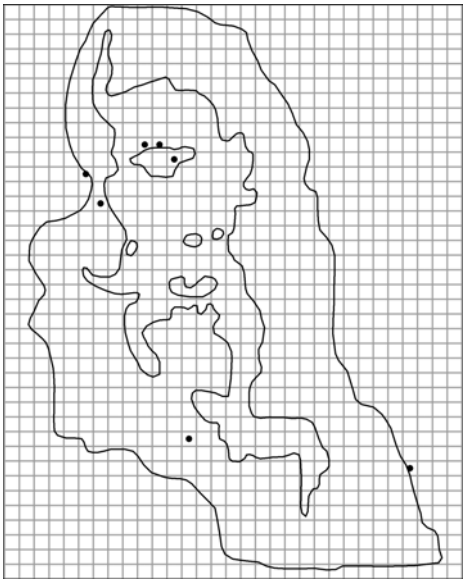

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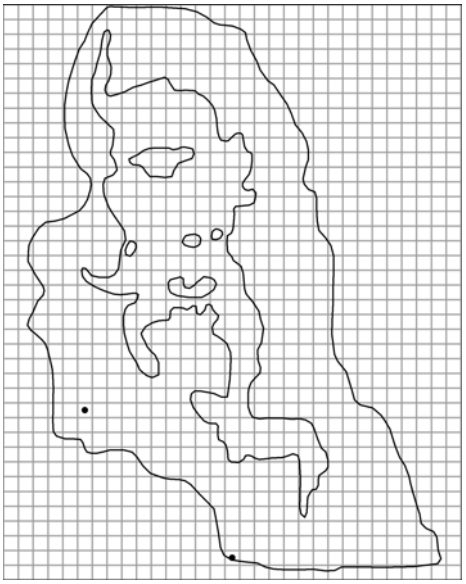

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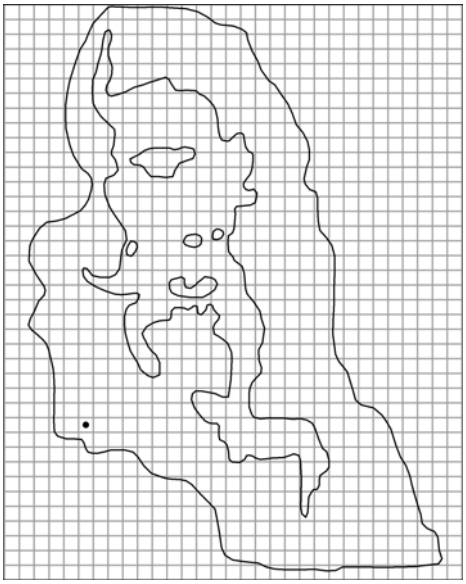

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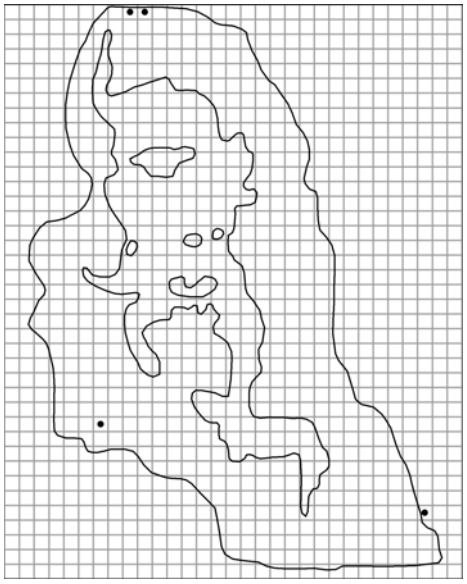
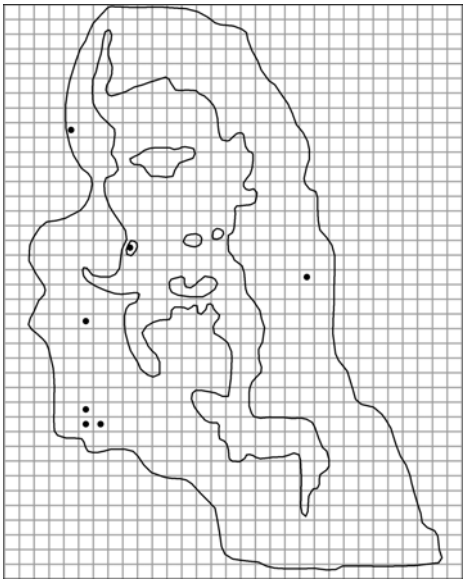
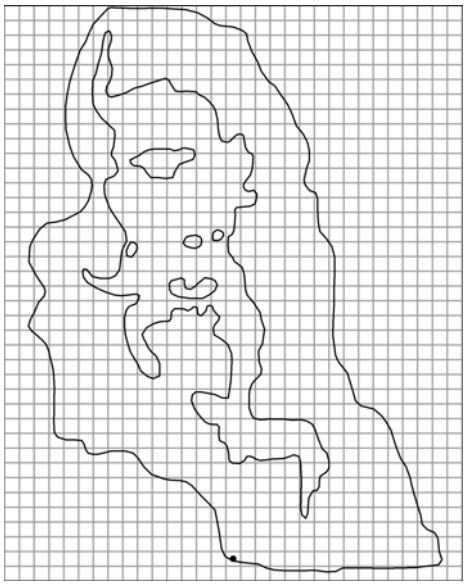


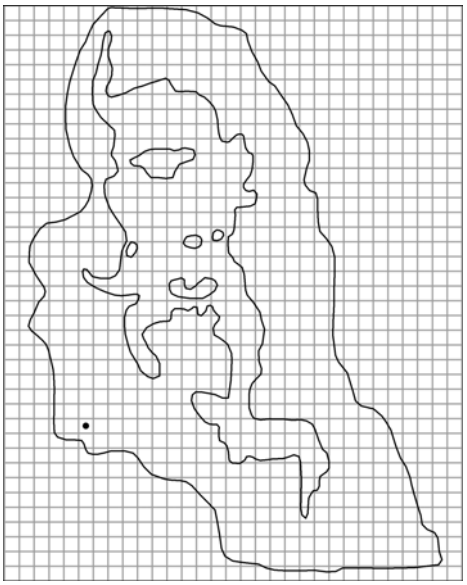
Alchemilla hirsuticaulis



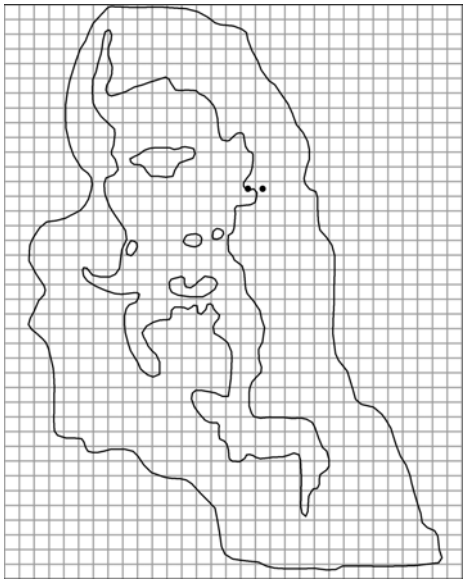
Alchemilla monticola



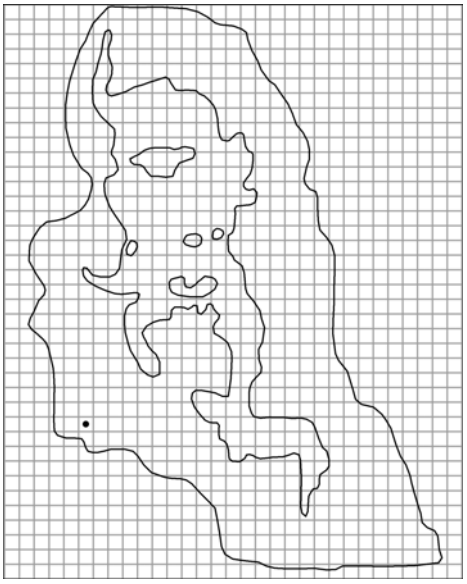
Alchemilla obtusa



Alchemilla plicata



Alchemilla propinqua



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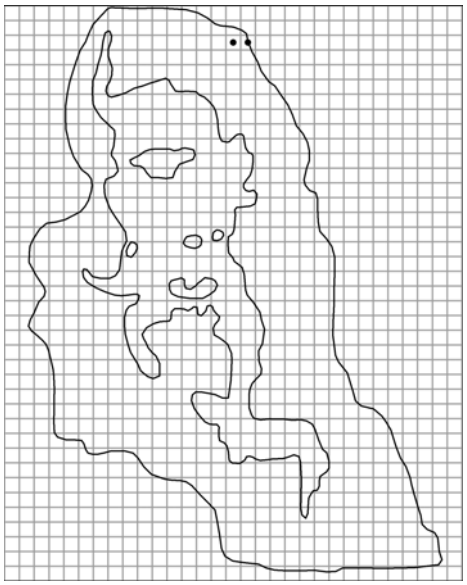
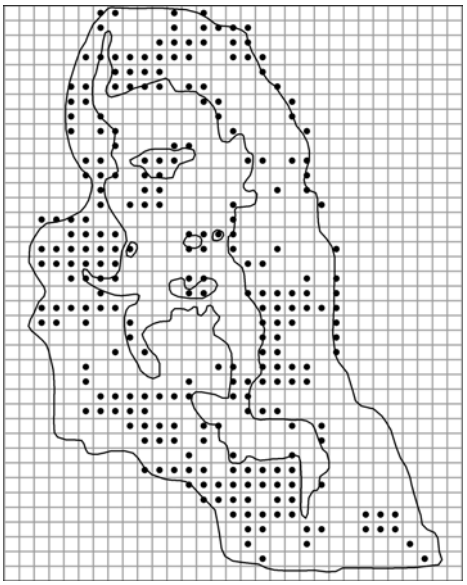
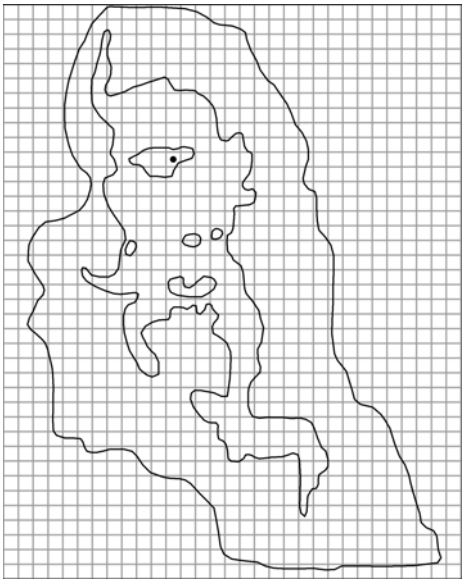


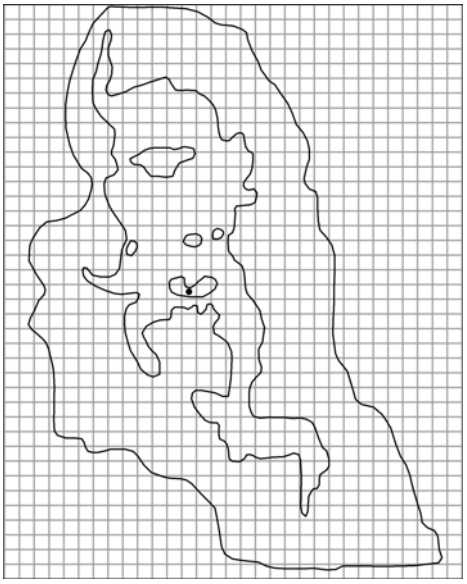
Alchemilla subglobosa



Alisma plantago-aquatica



Allium oleraceum



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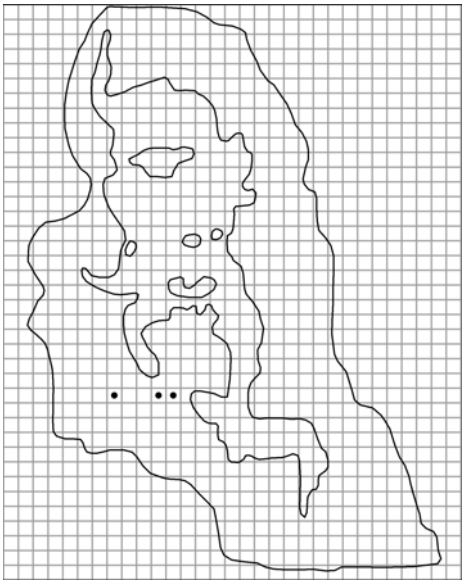

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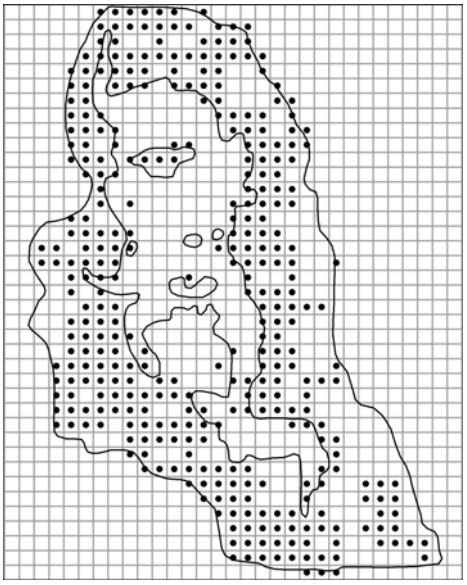
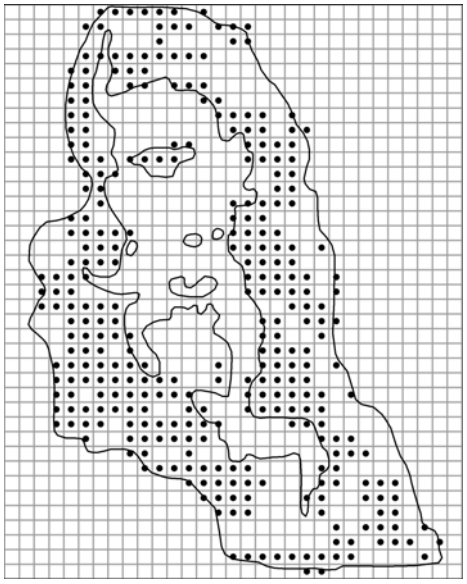


Alnus glutinosa



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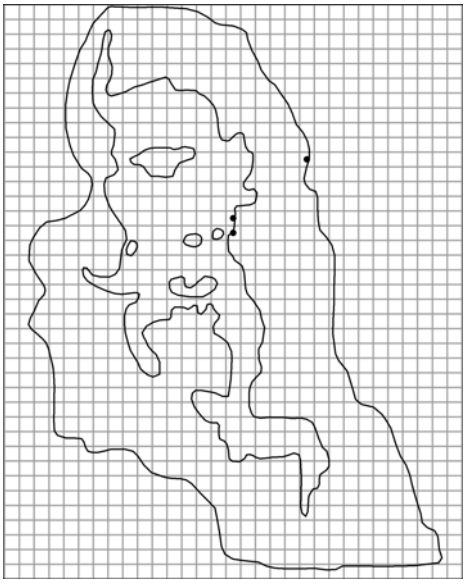
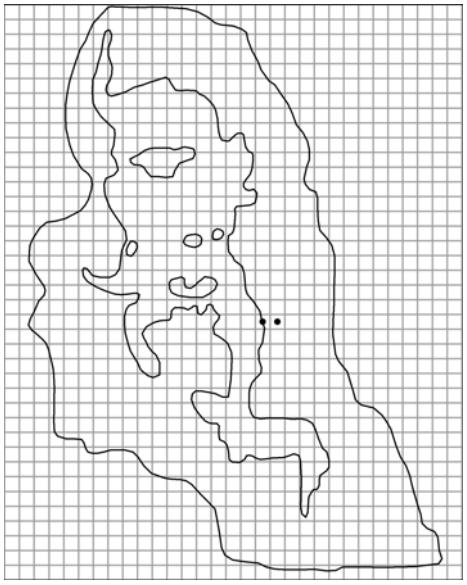
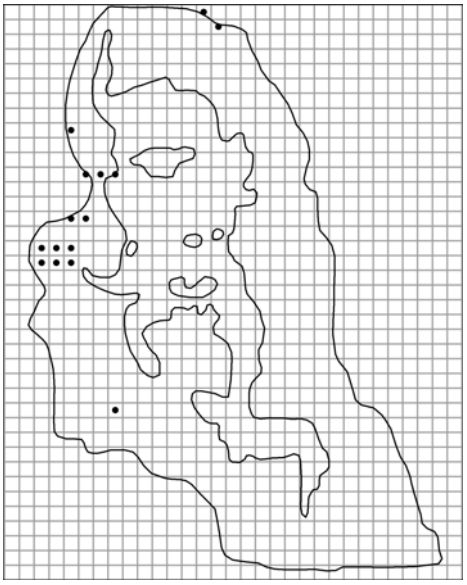


Alopecurus aequalis



Alopecurus × brachystylus



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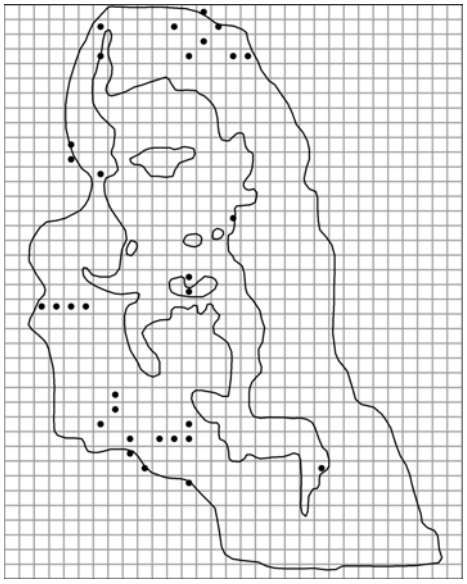

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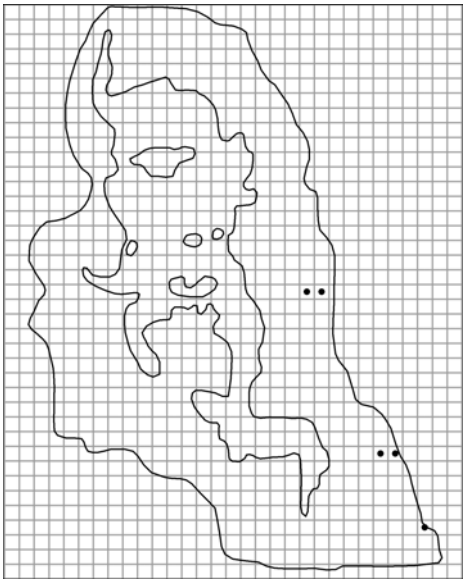
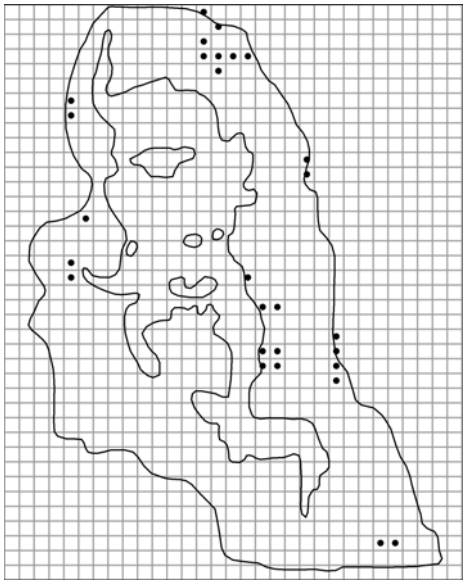
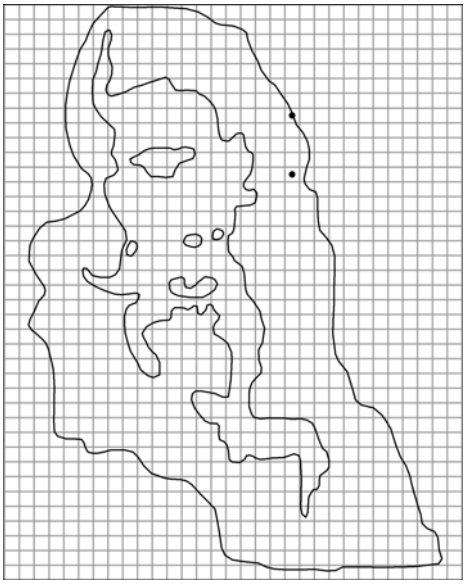


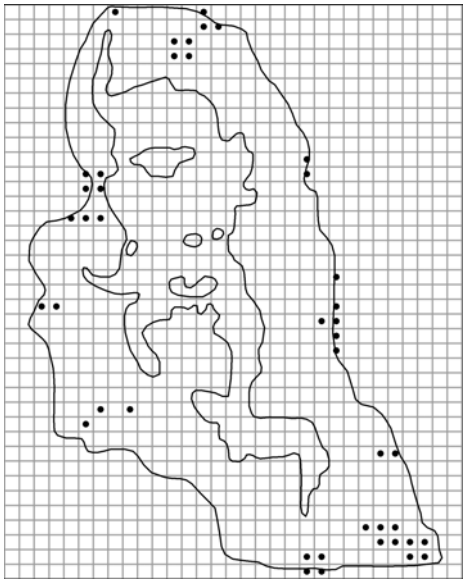
Amaranthus retroflexus



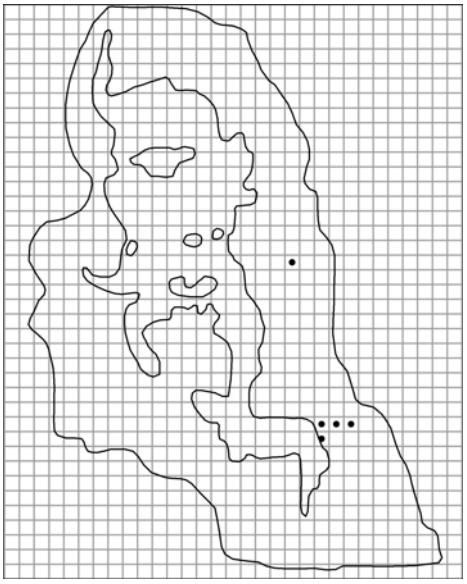
Amelanchier spicata



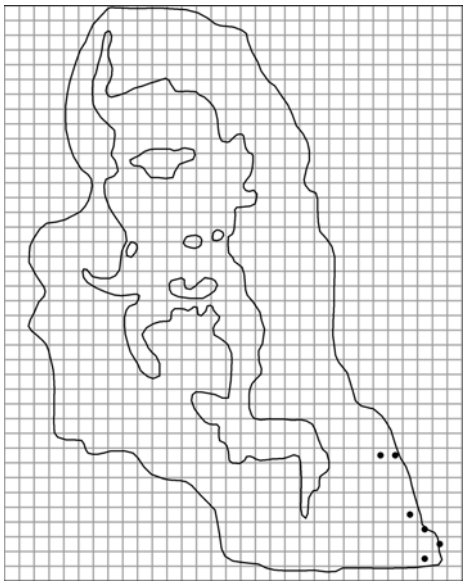
Ammophila arenaria



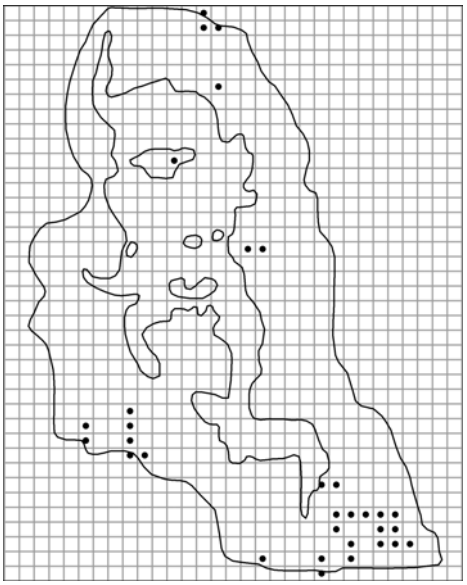
Anchusa officinalis



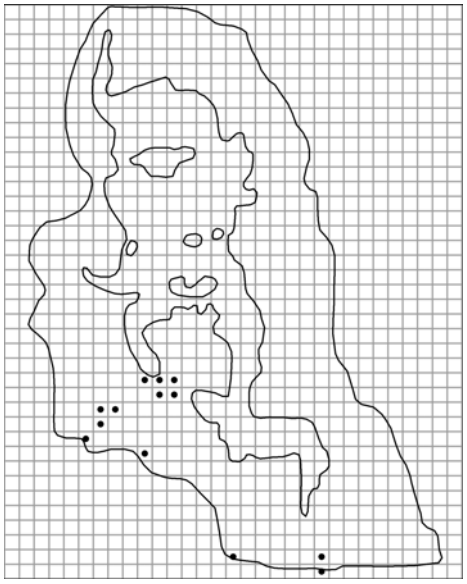
Andromeda polifolia



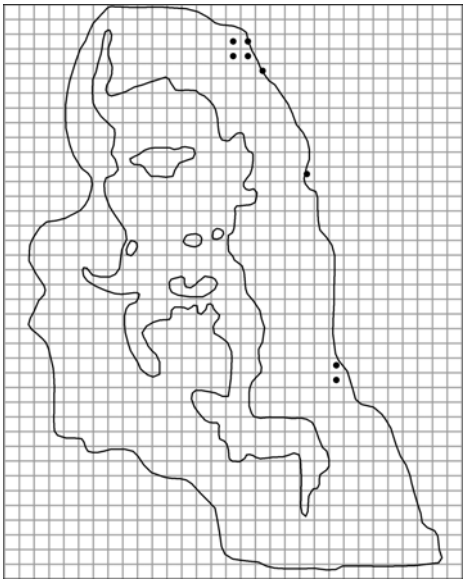
Androsace septentrionalis



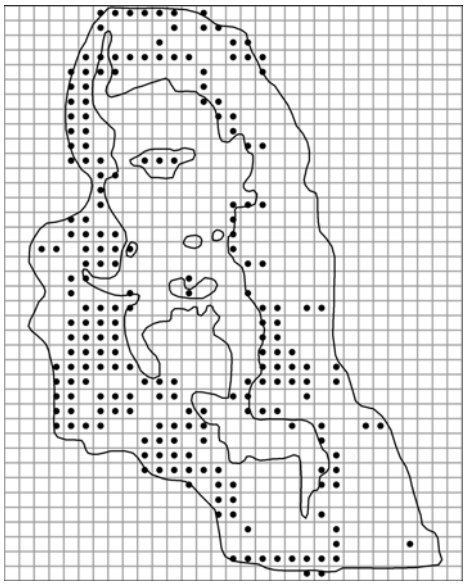
Anemone nemorosa



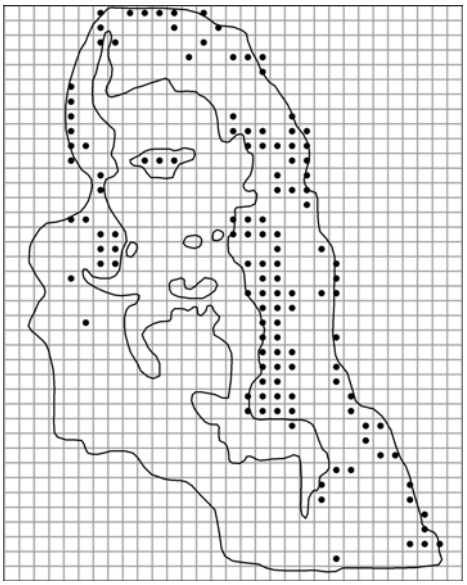
Anemone ranunculoides



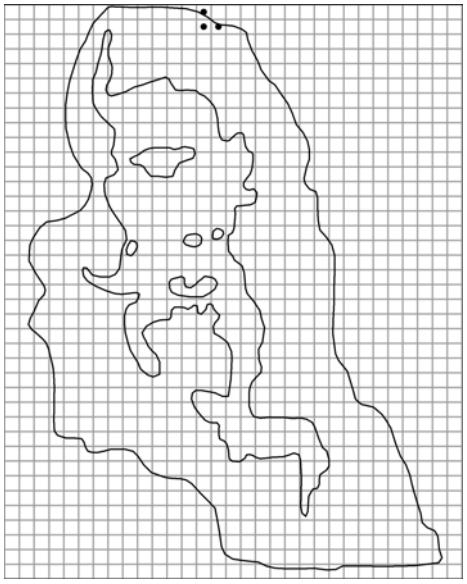
Angelica archangelica



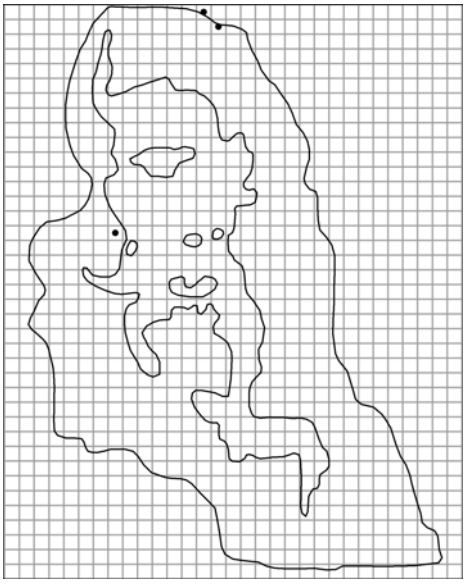
Angelica sylvestris



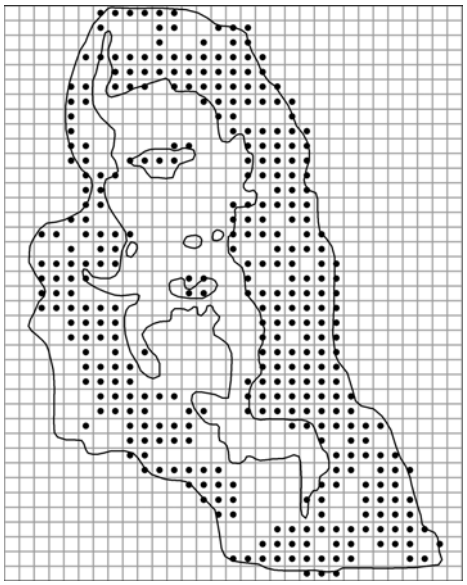
Antennaria dioica



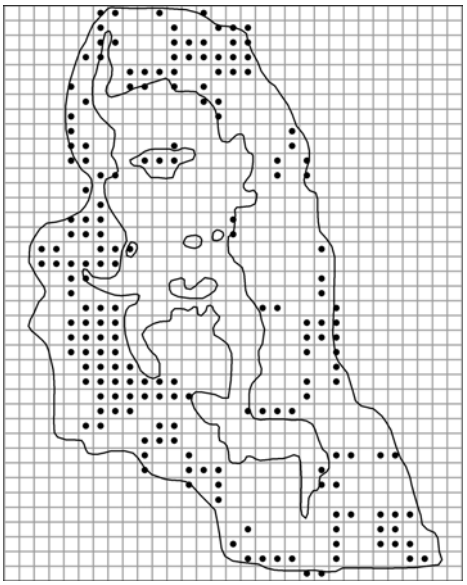
Anthemis arvensis



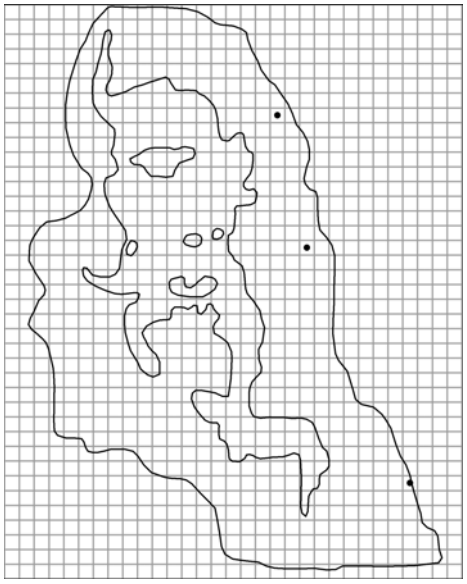
Anthemis tinctoria



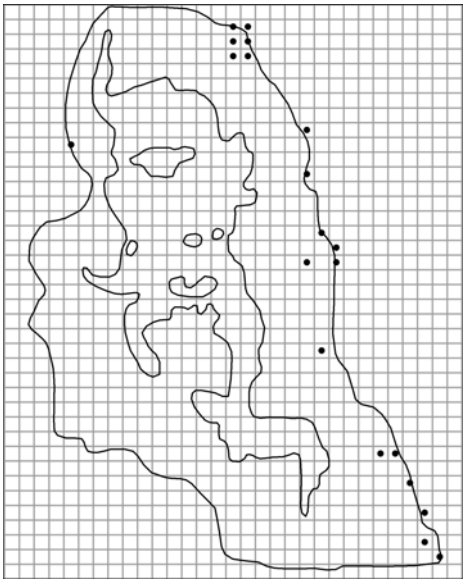
Anthoxanthum odoratum



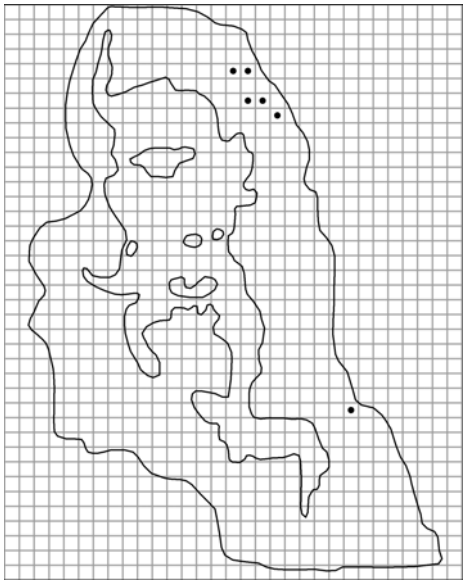
Anthriscus sylvestris



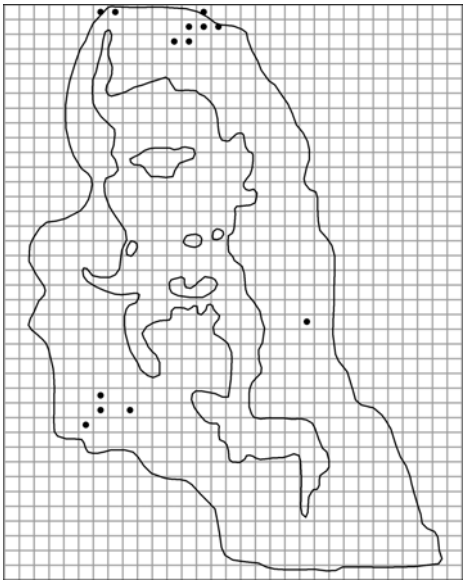
Anthyllis × baltica



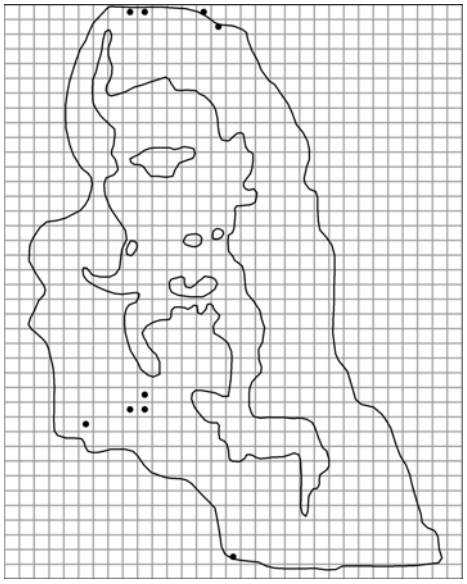
Anthyllis maritima



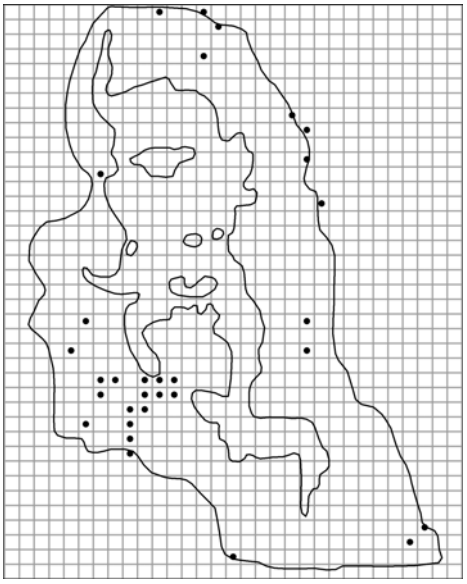
Anthyllis vulneraria



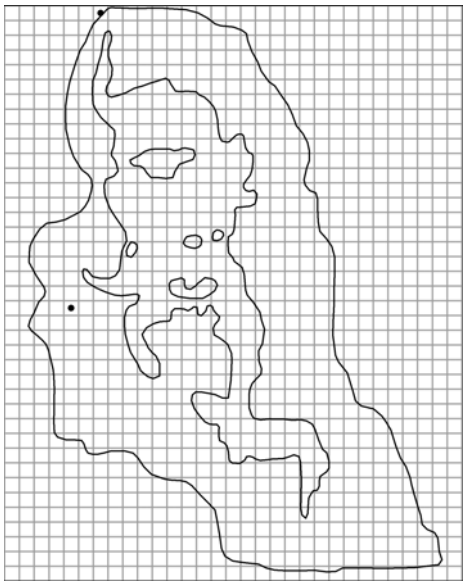
Apera spica-venti



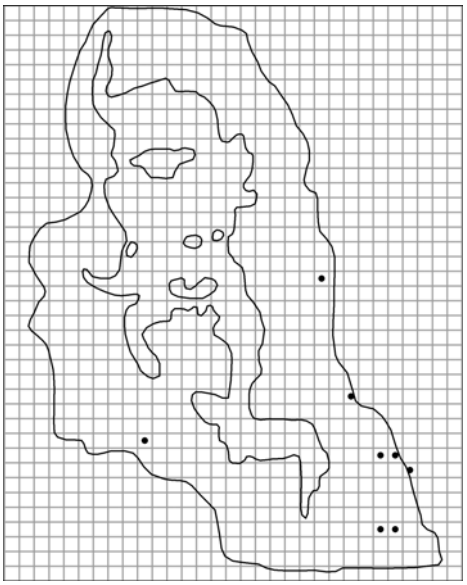
Aquilegia vulgaris



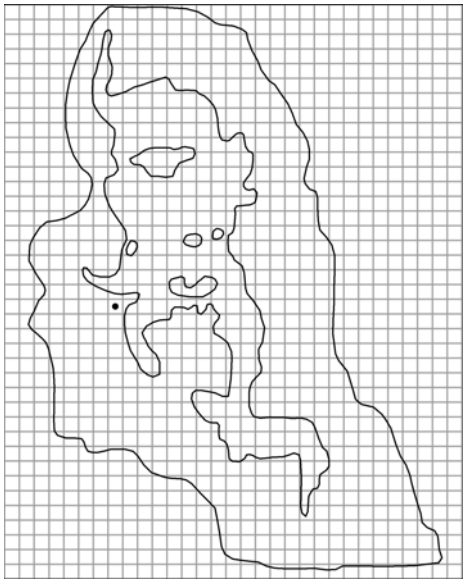
Arabidopsis thaliana



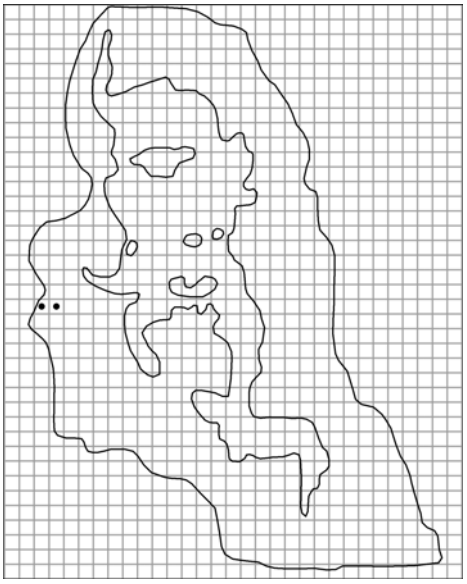
Arabis gerardii



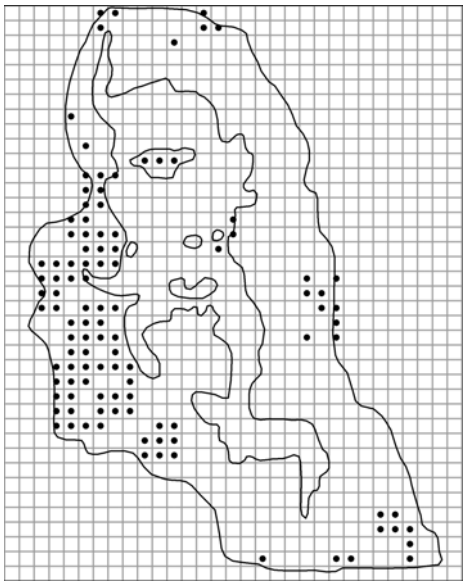
Arabis sagittata



Arctium lappa



Arctium minus



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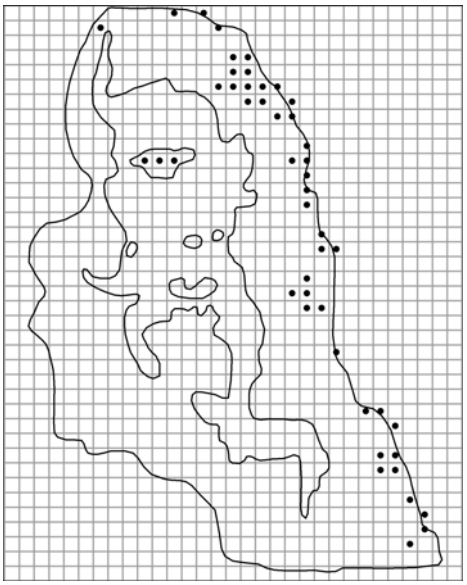

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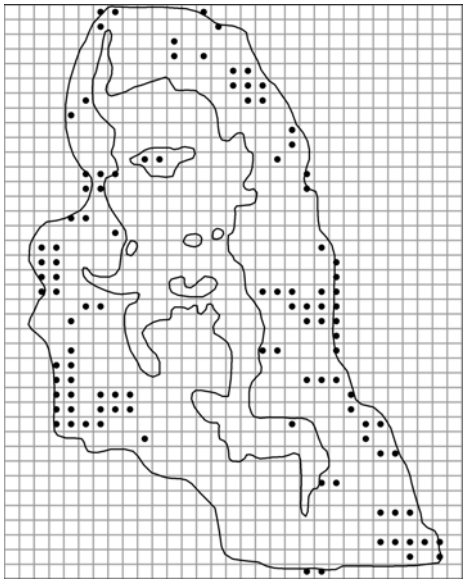

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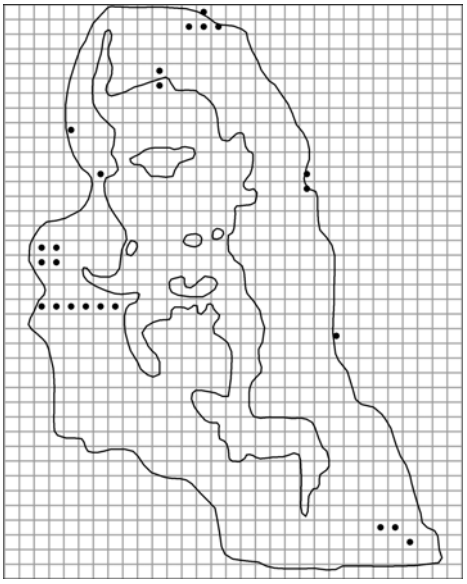
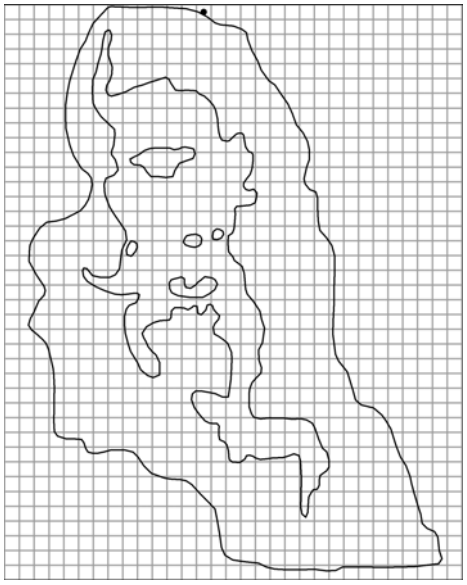


Armoracia rusticana



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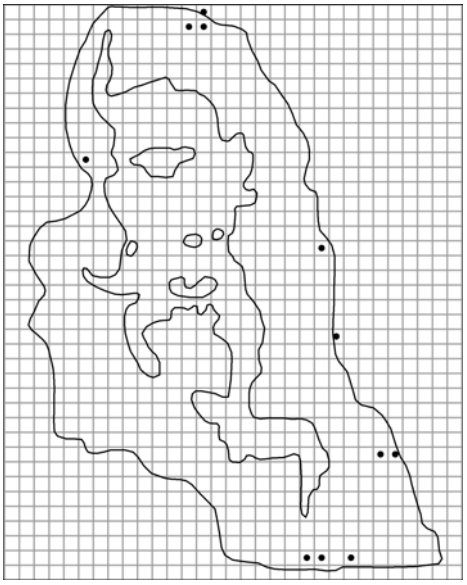
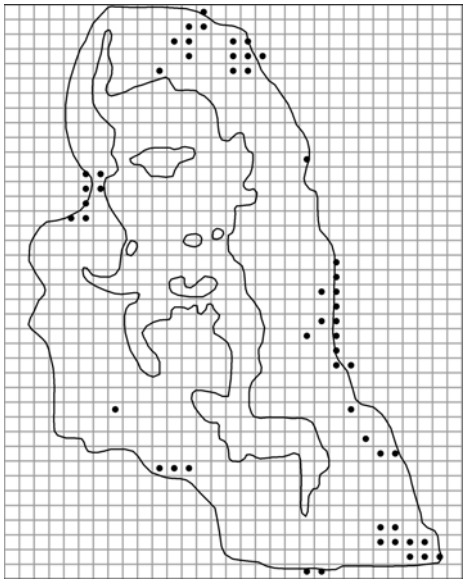
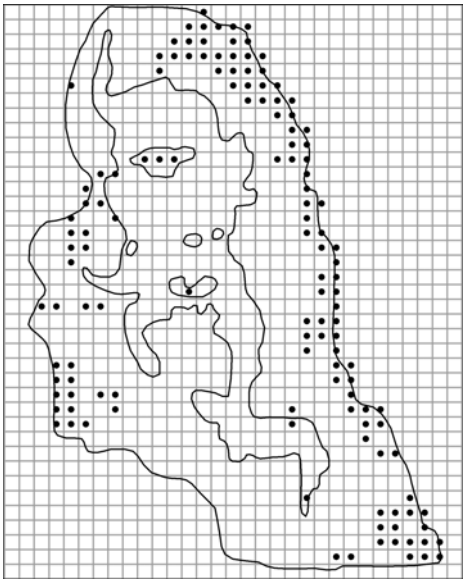


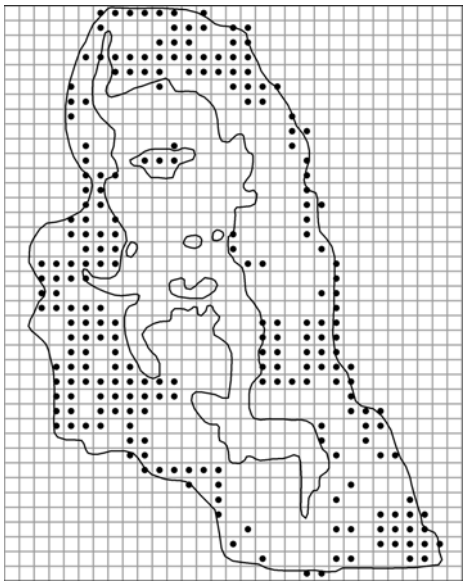
Arrhenatherum elatius



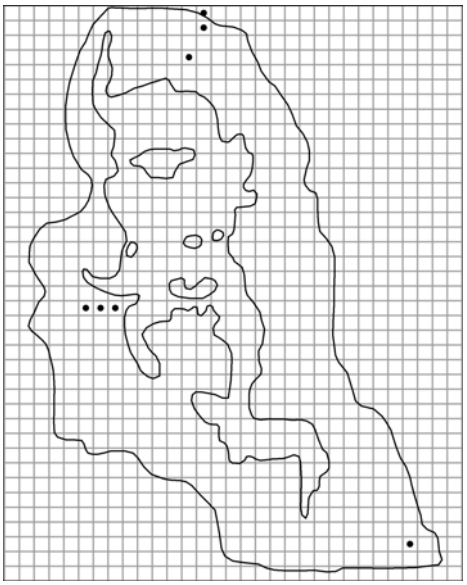
Artemisia absinthium



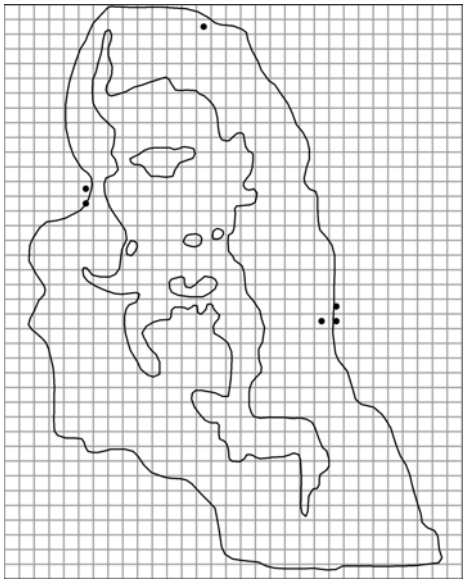
Artemisia campestris



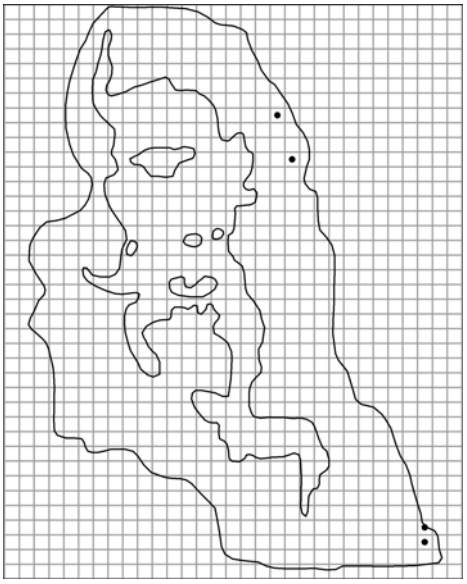
Artemisia vulgaris



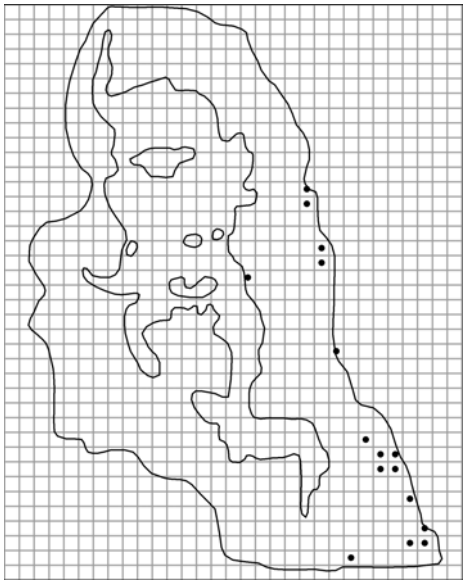
Asarum europaeum



Asperugo procumbens



Astragalus arenarius



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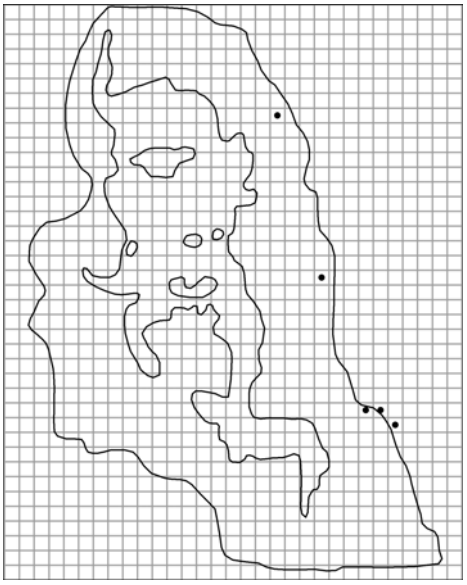

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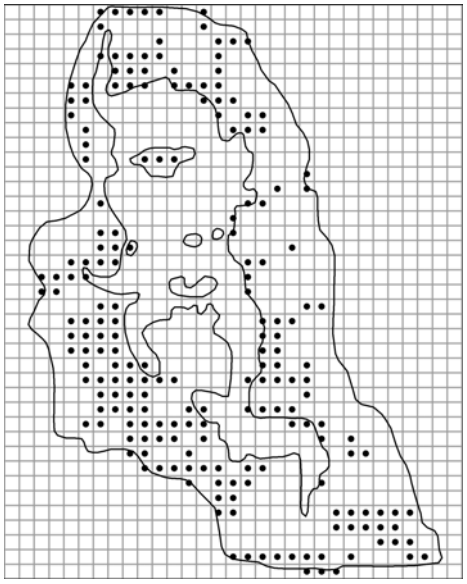
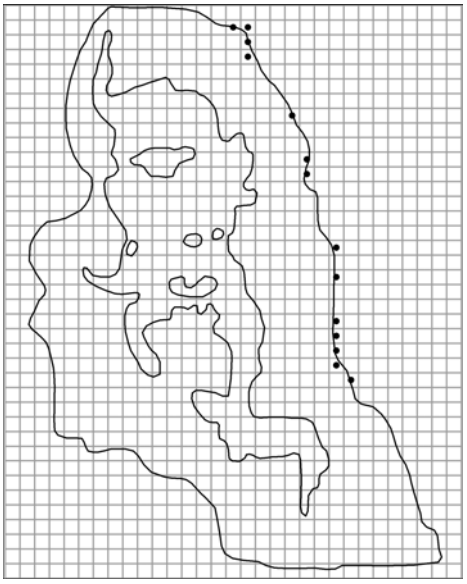
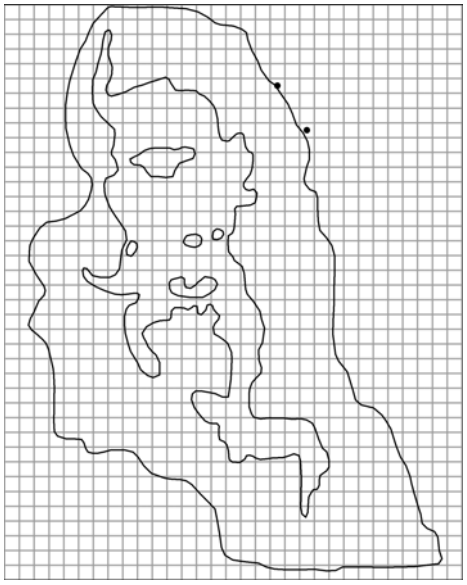


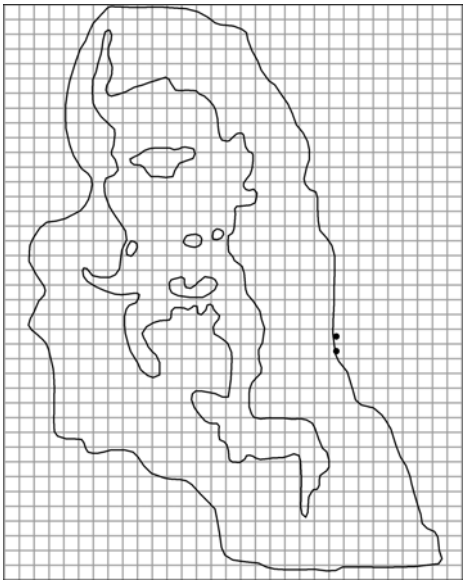
Athyrium filix-femina



Atriplex calotheca



Atriplex glabriuscula



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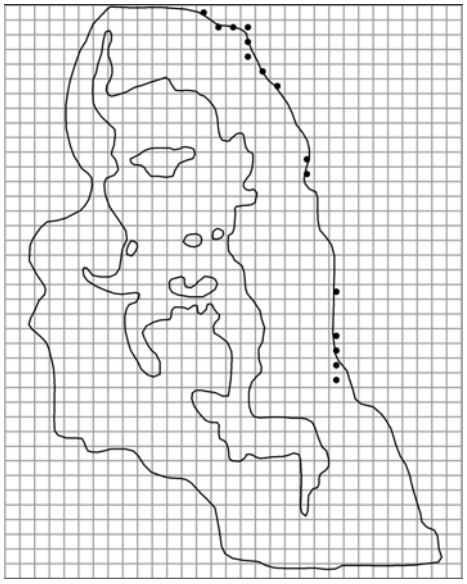
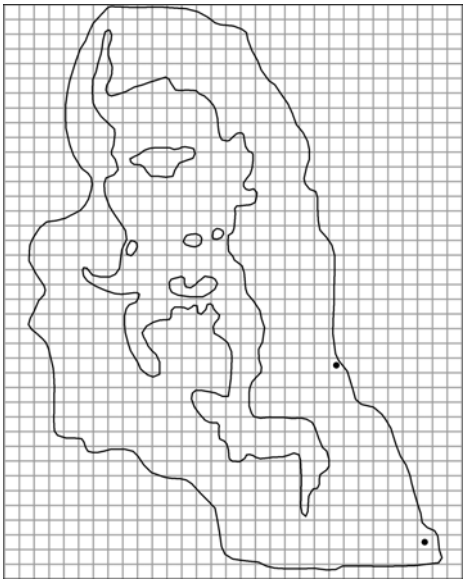
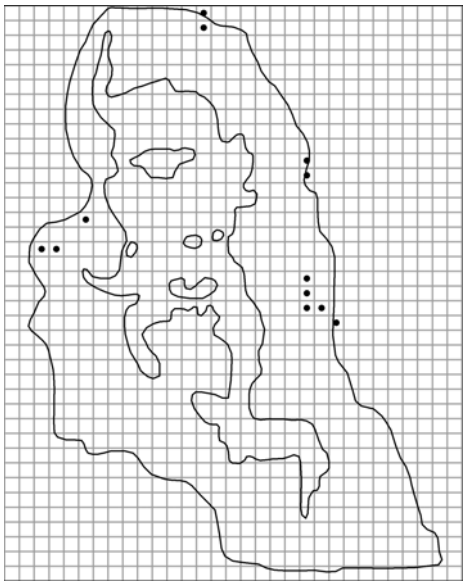


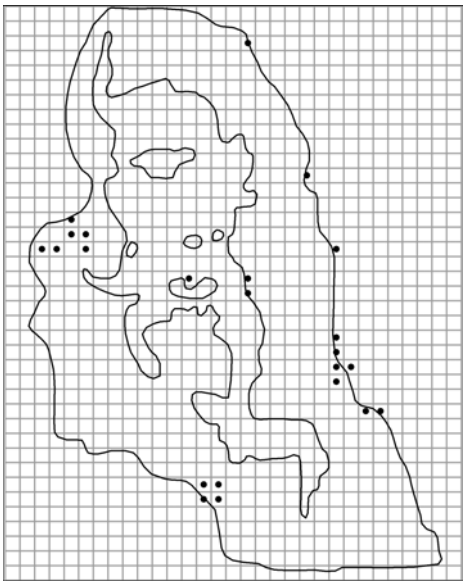
Atriplex littoralis



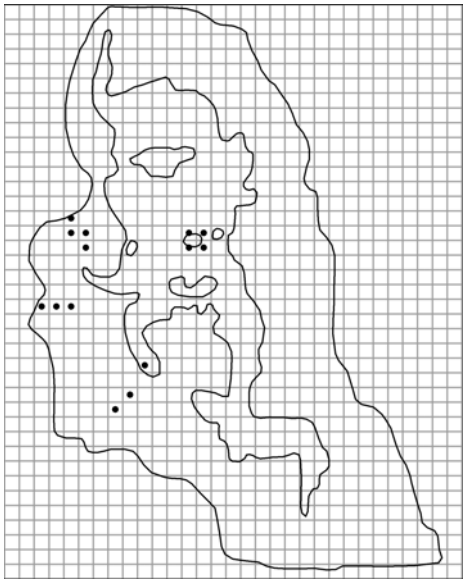
Atriplex longipes



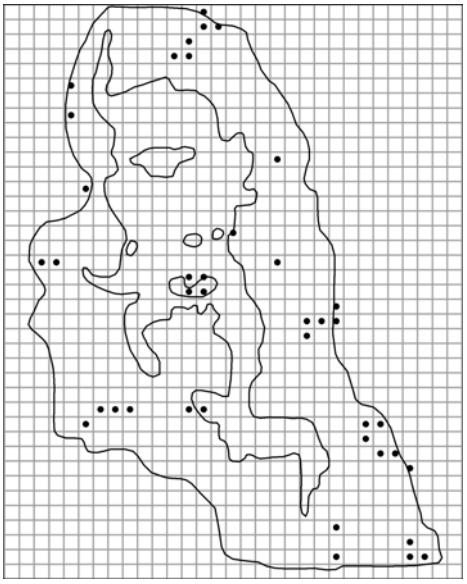
Atriplex patula



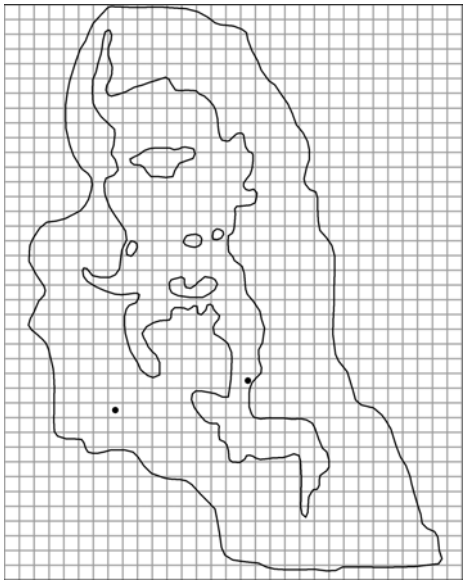
Atriplex prostrata



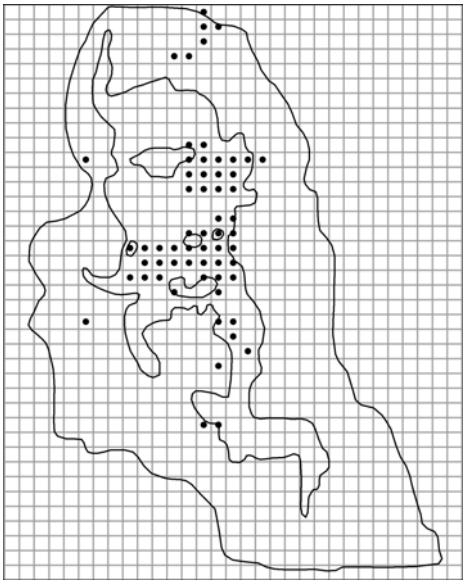
Barbarea stricta



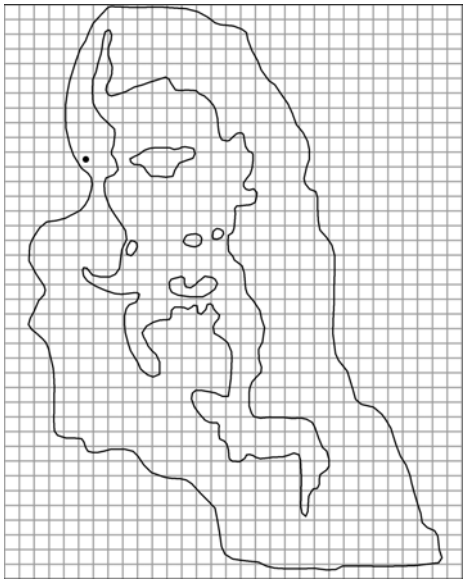
Barbarea vulgaris



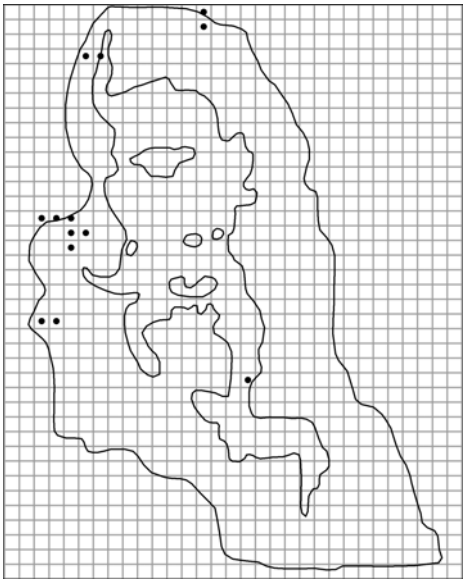
Batrachium baudotii



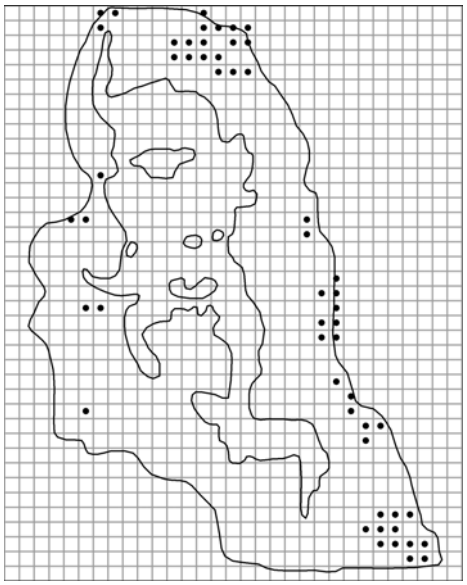
Batrachium circinatum



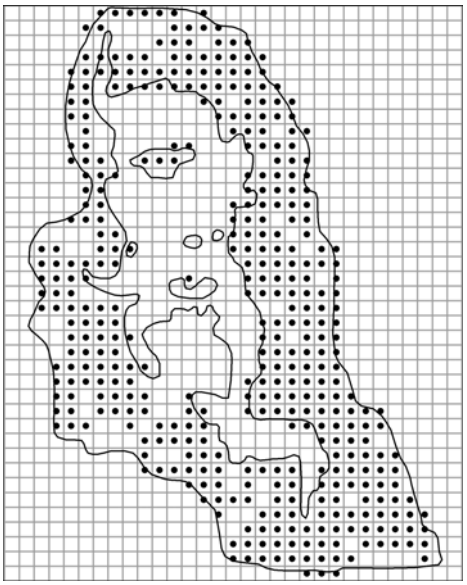
Batrachium peltatum



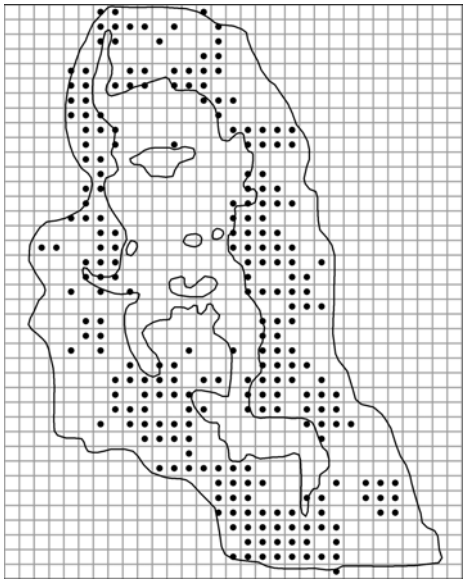
Batrachium trichophyllum



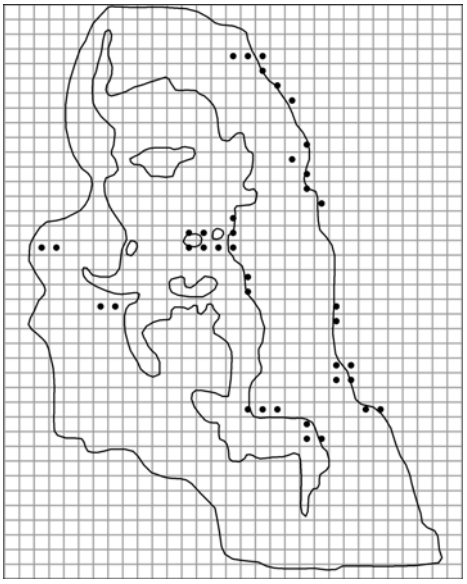
Berteroa incana



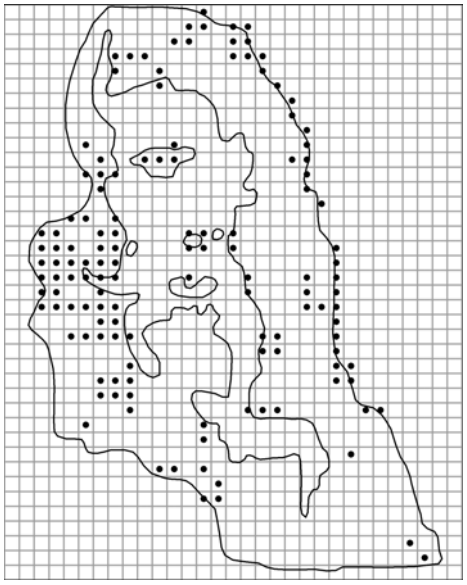
Betula pendula



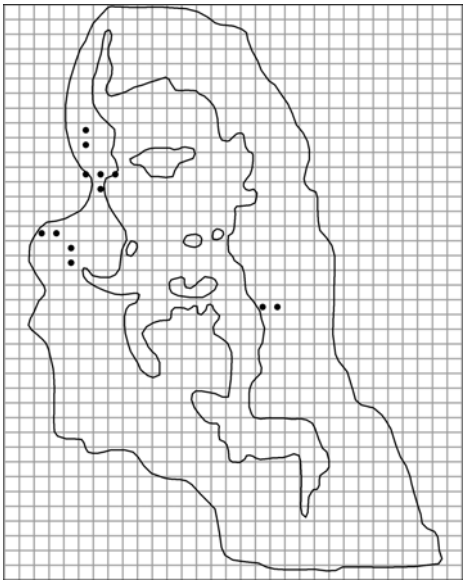
Betula pubescens



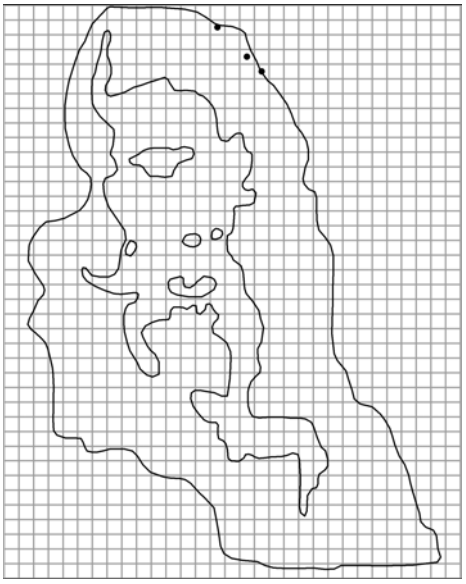
Bidens cernua



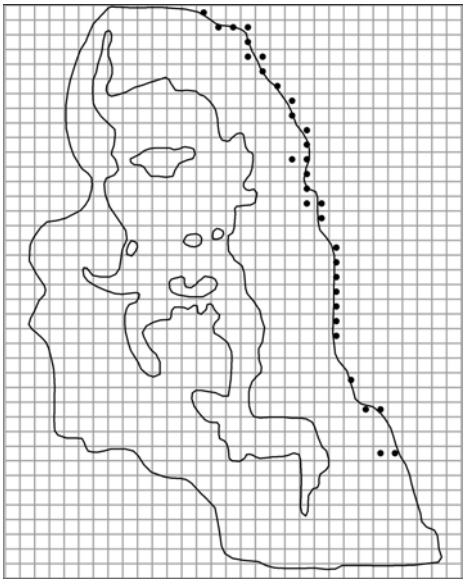
Bidens tripartita



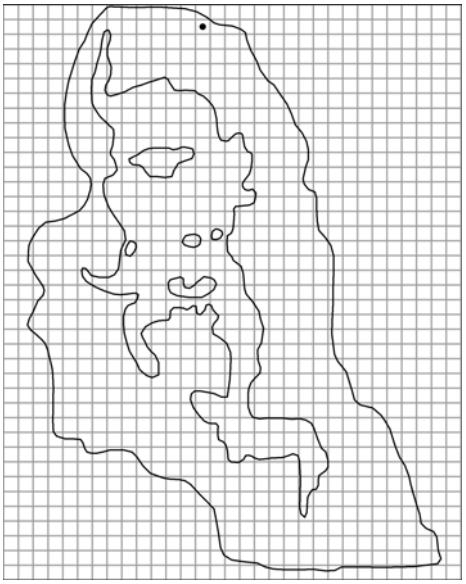
Blysmus compressus



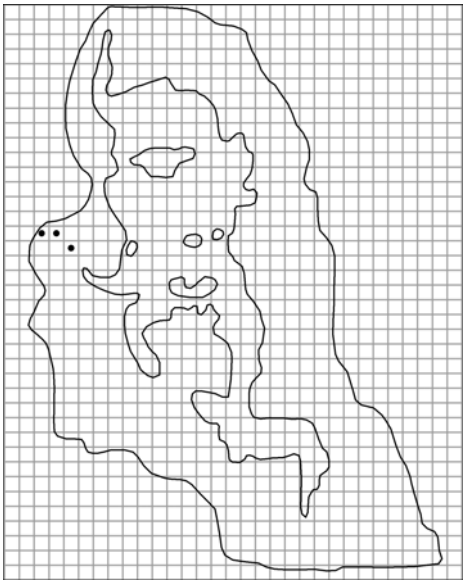
Blysmus rufus



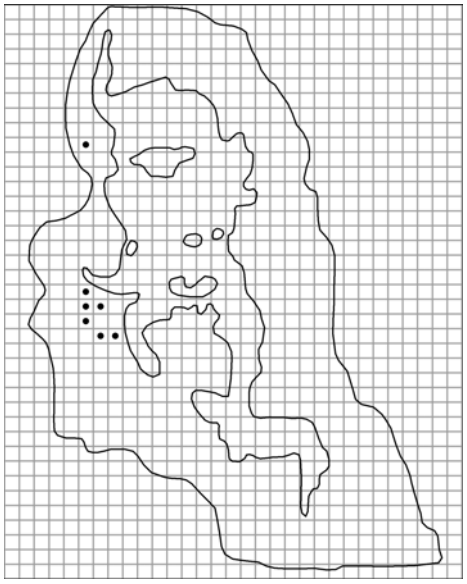
Bolboschoenus maritimus



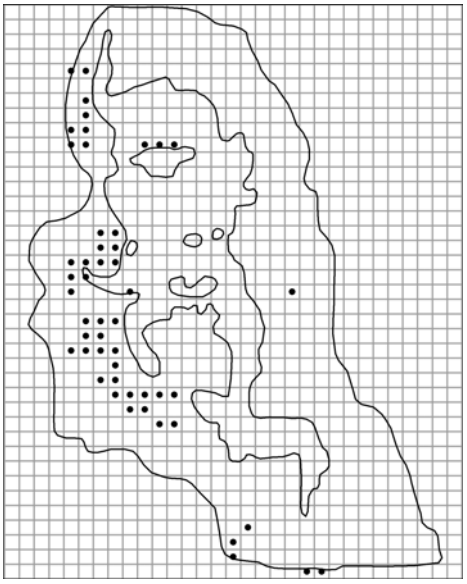
Botrychium lunaria



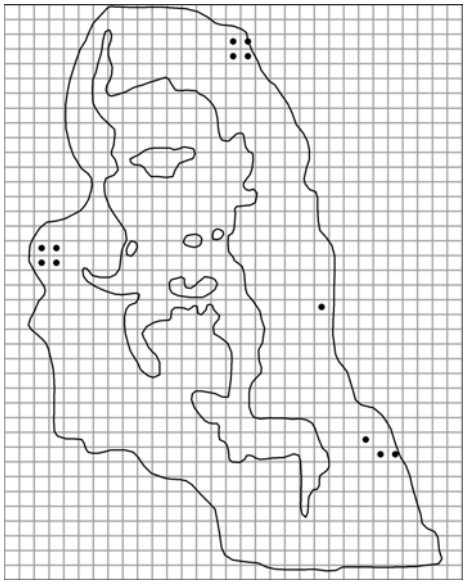
Botrychium simplex



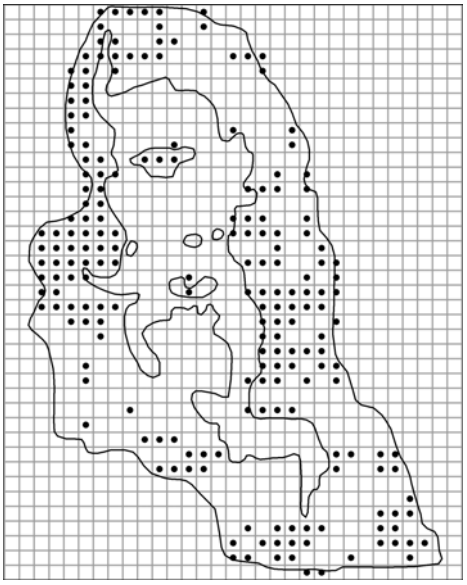
Brachypodium pinnatum



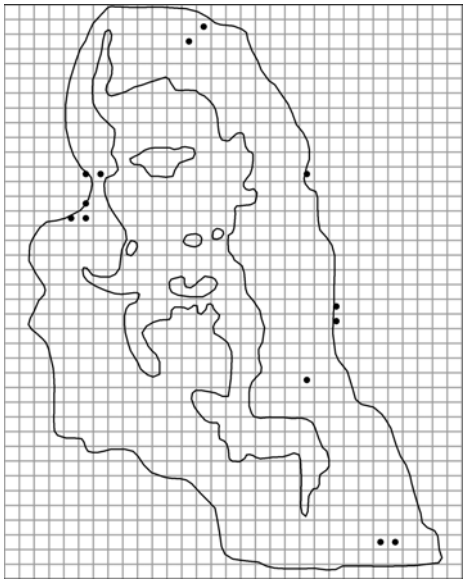
Brachypodium sylvaticum



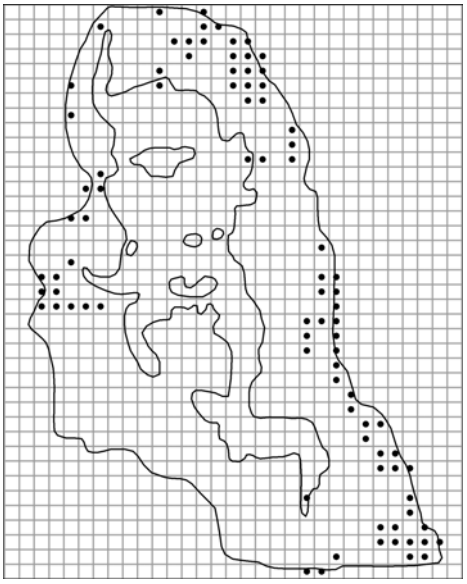
Brassica campestris



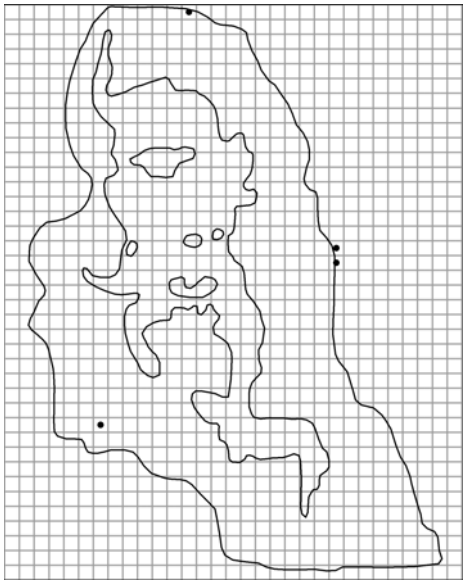
Briza media



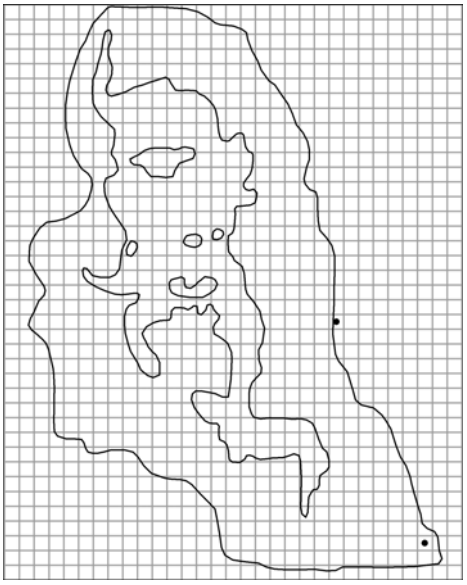
Bromopsis inermis



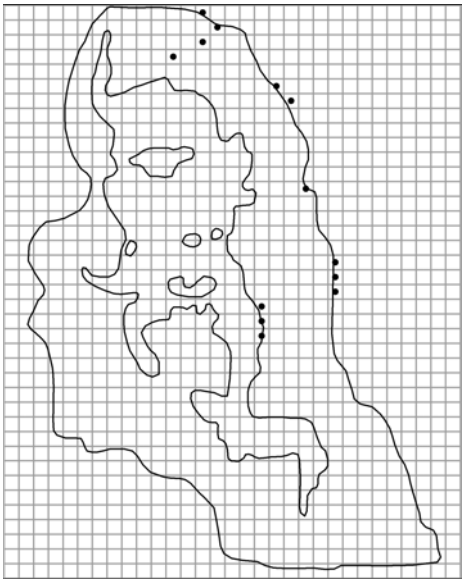
Bromus mollis



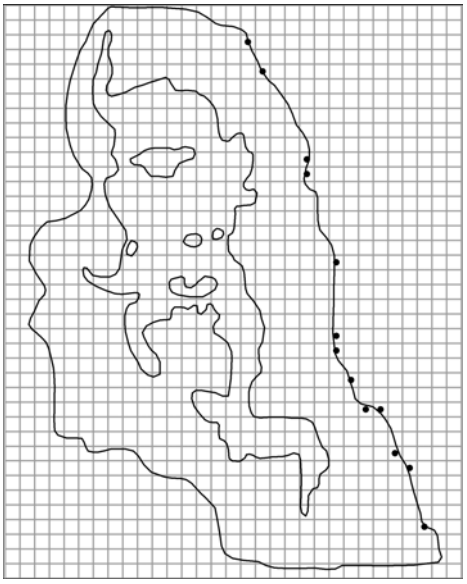
Buglossoides arvensis



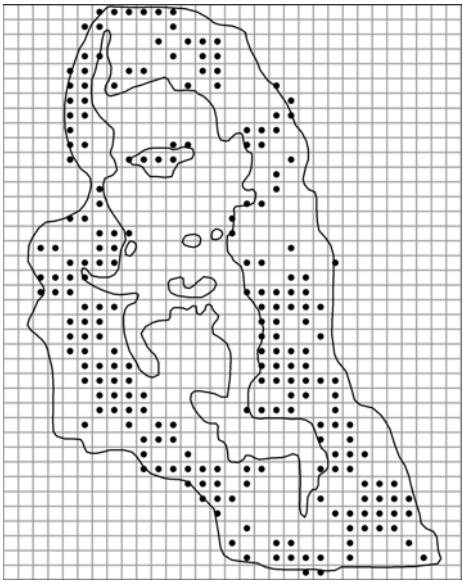
Bunias orientalis



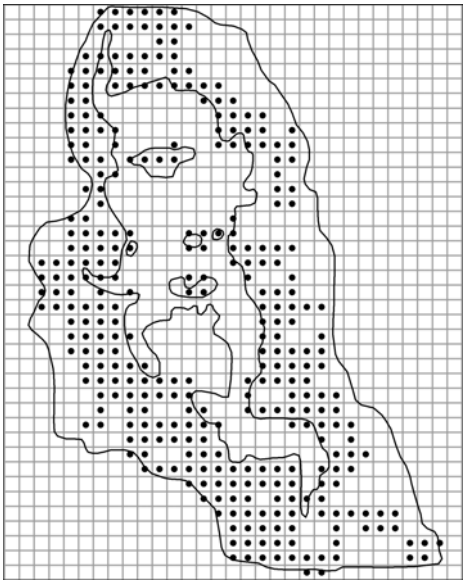
Butomus umbellatus



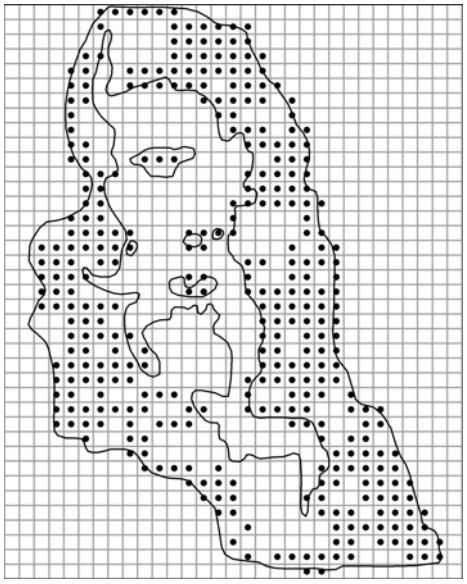
Cakile baltica



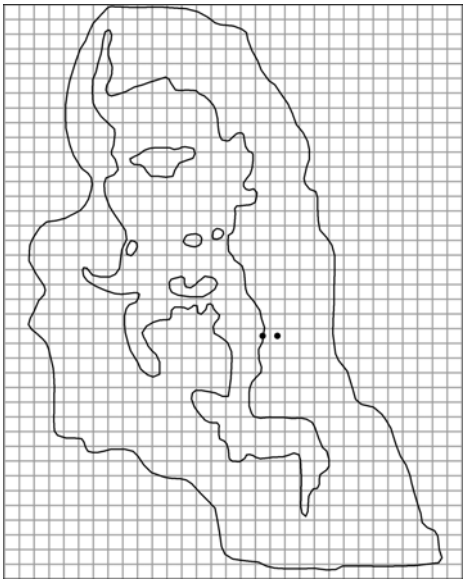
Calamagrostis arundinacea



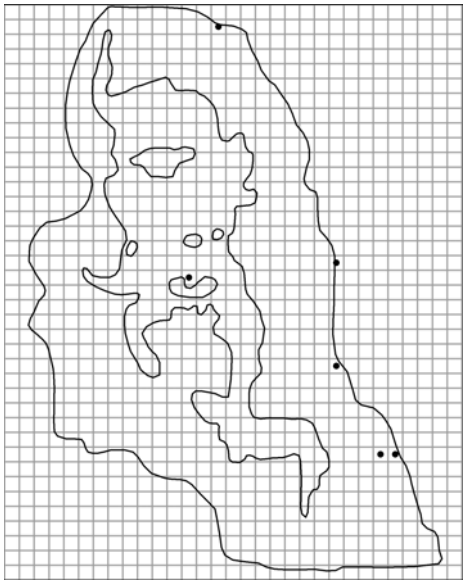
Calamagrostis canescens



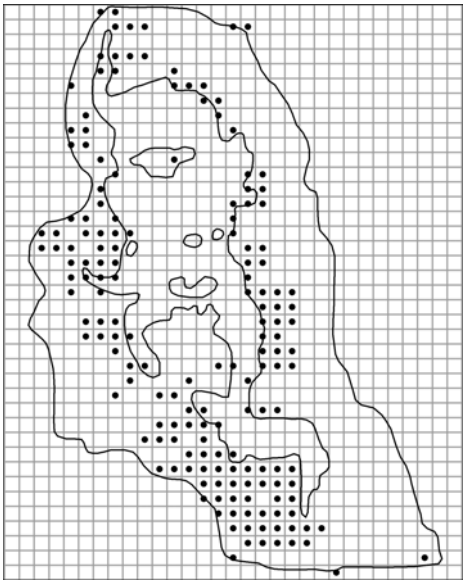
Calamagrostis epigeios



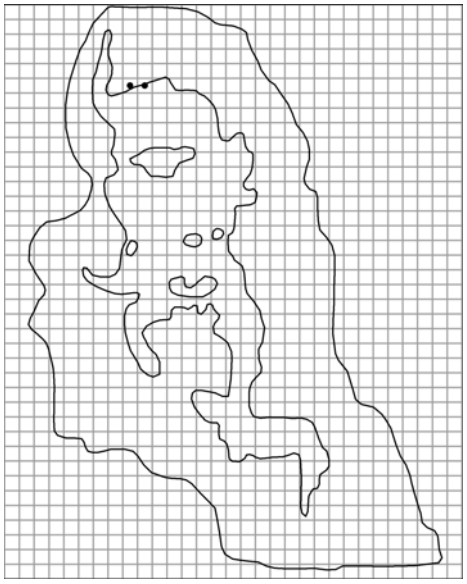
Calamagrostis langsdorffii



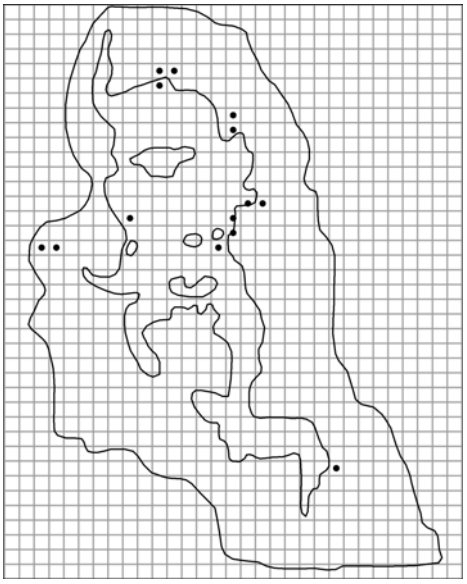
Calamagrostis meinshausenii



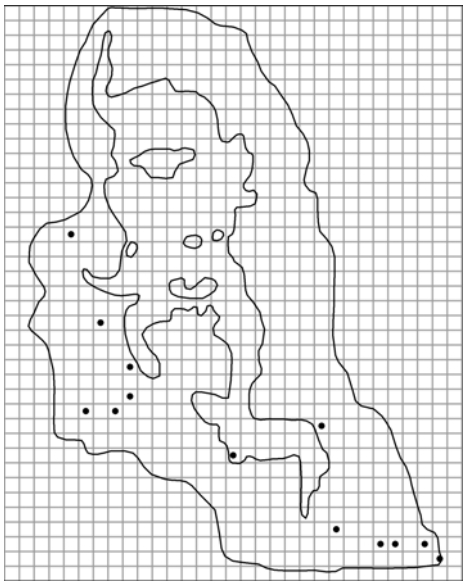
Calamagrostis neglecta



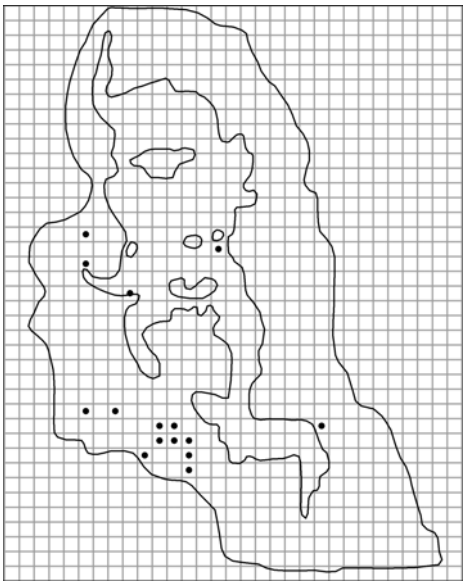
Calamagrostis stricta



Calla palustris



Callitriche cophocarpa



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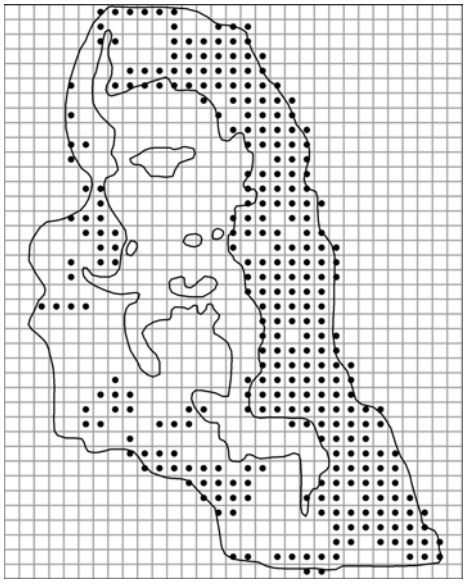

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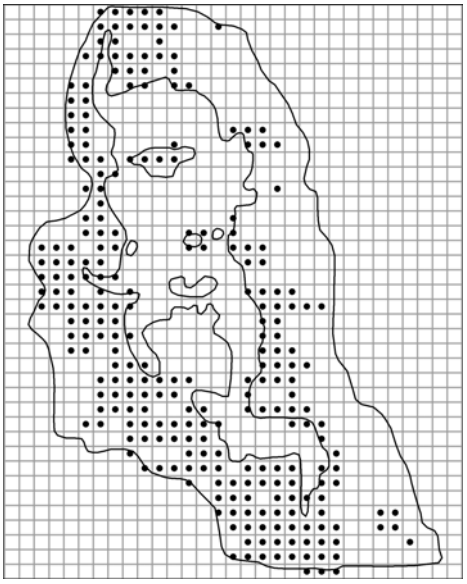

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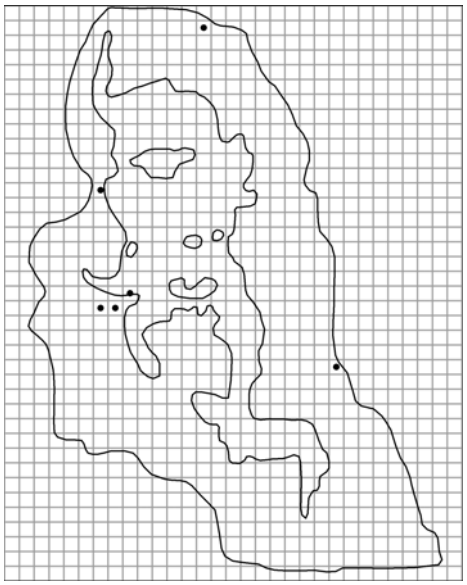

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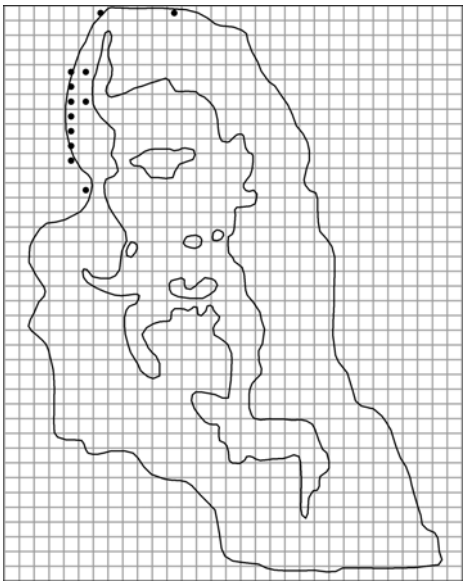
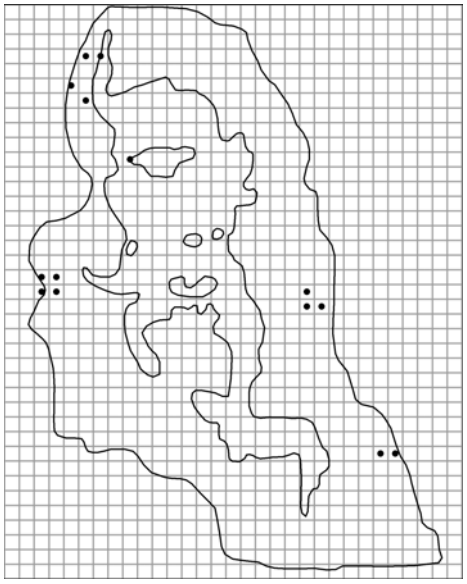


Campanula cervicaria



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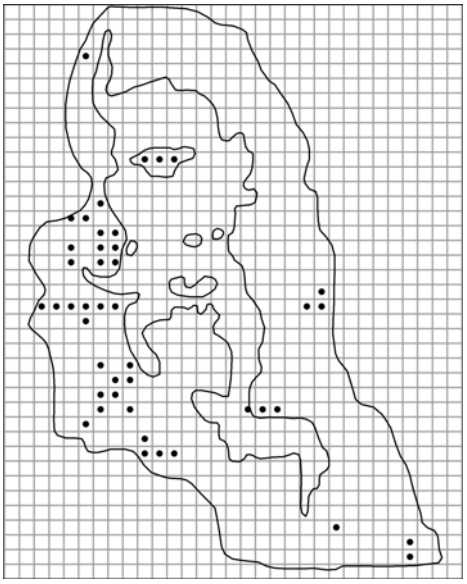

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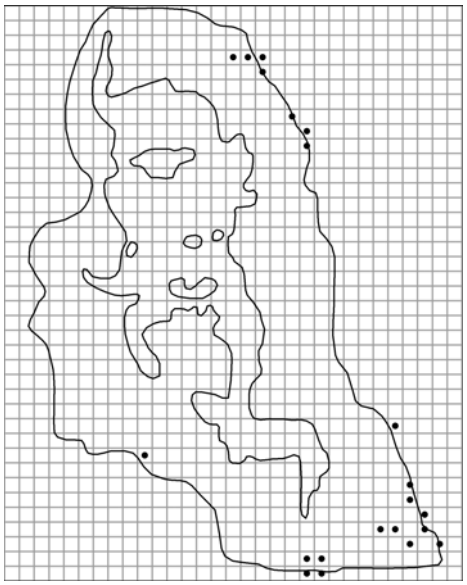

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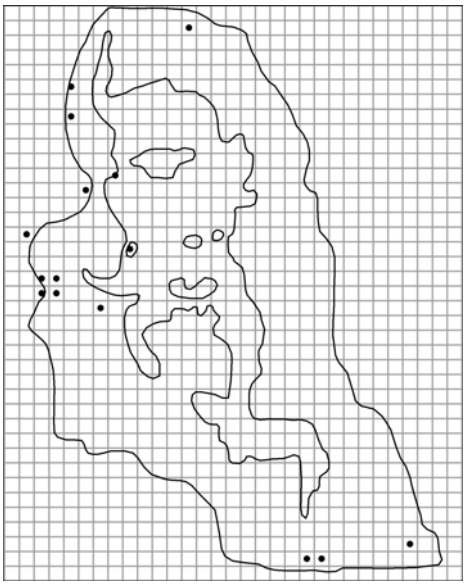

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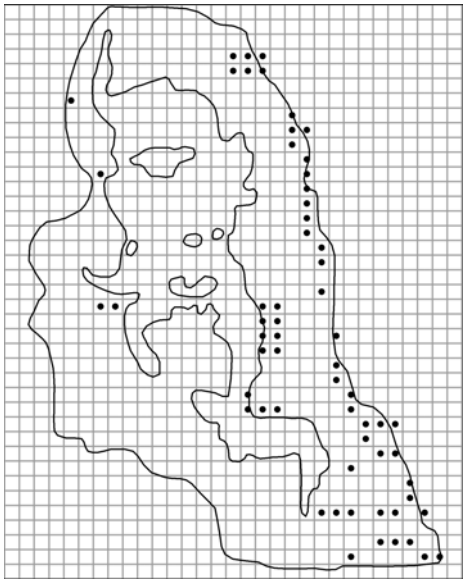

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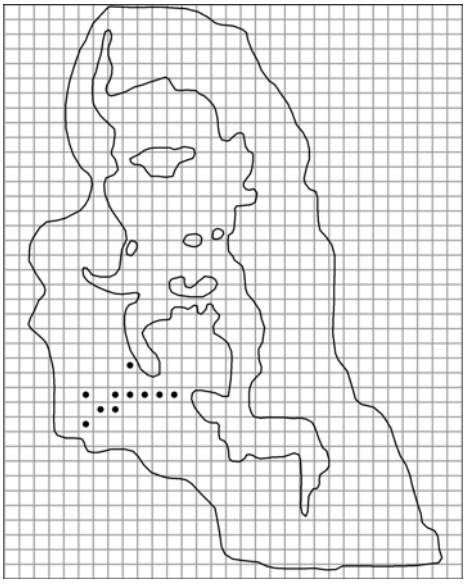

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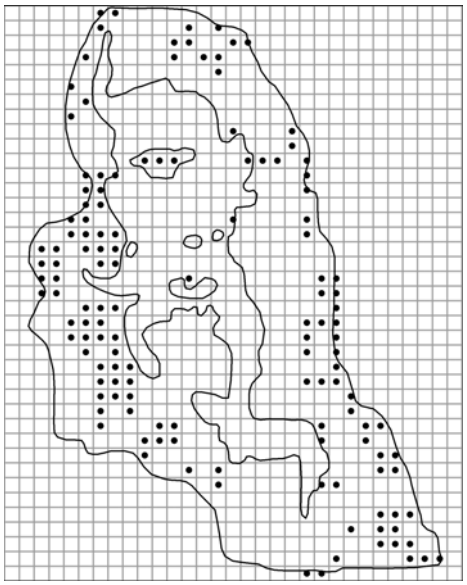

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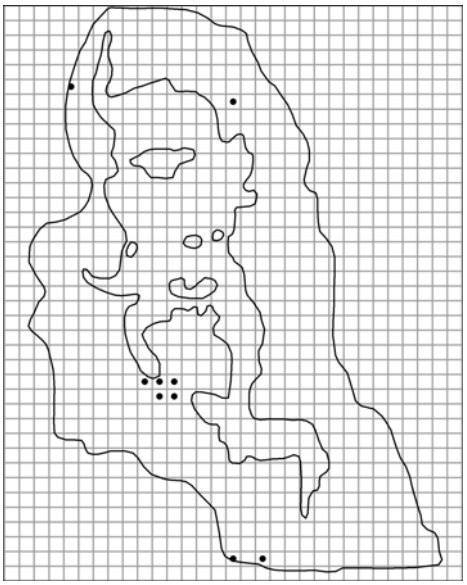

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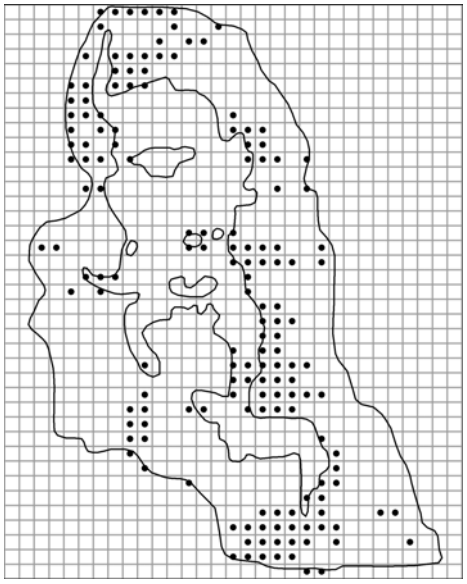

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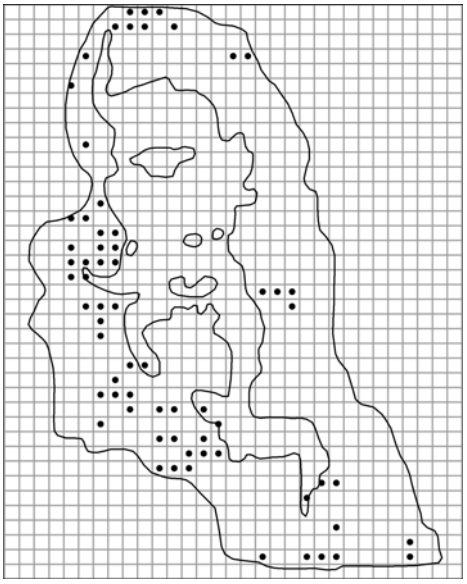

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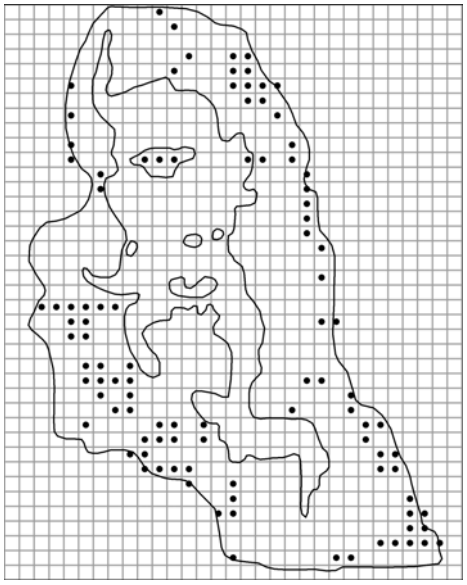

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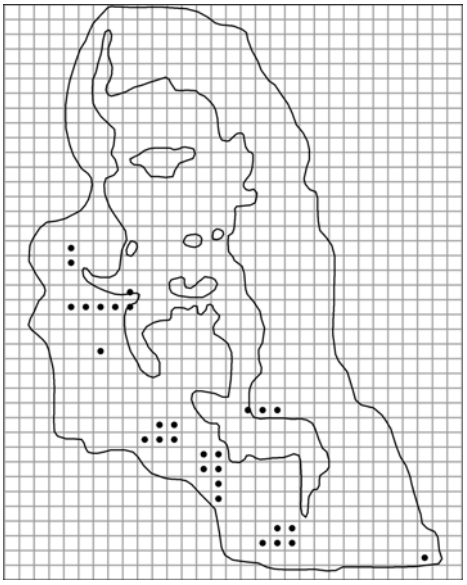

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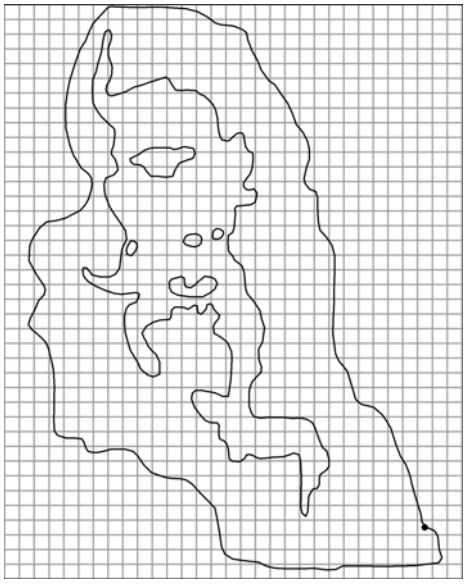

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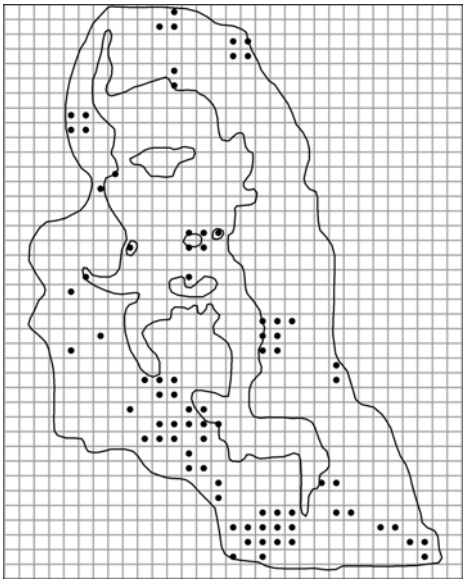

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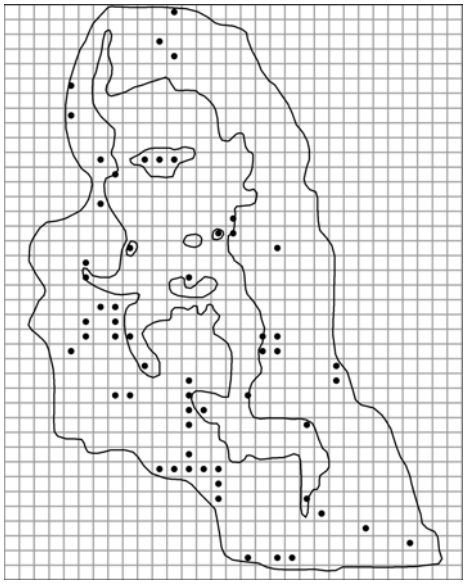

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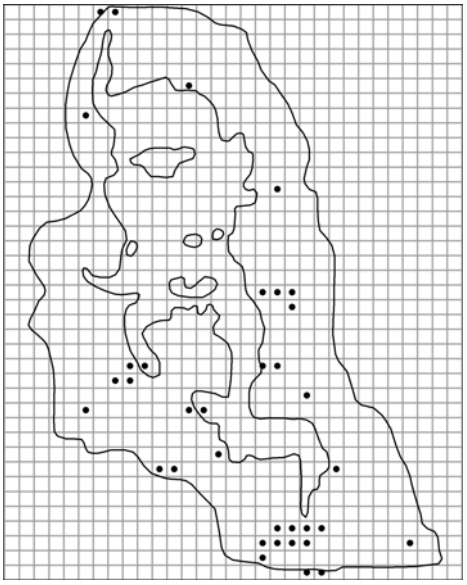

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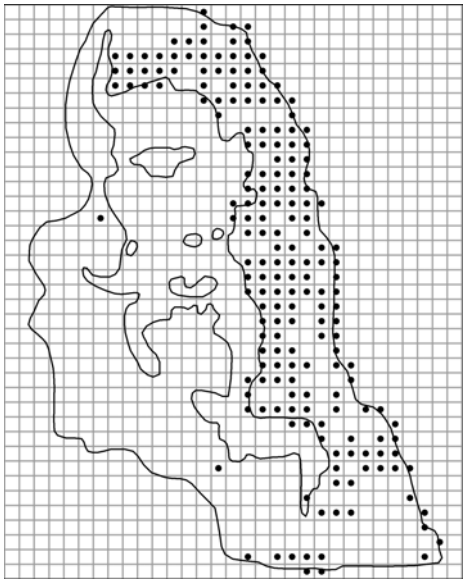

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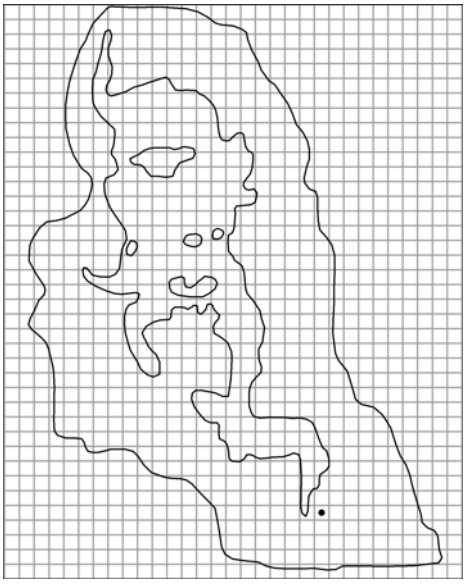

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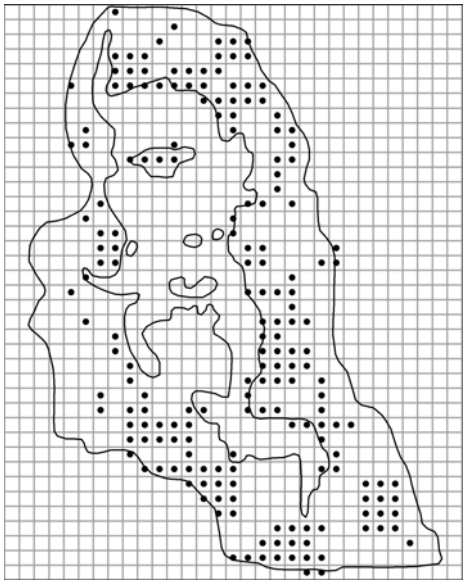

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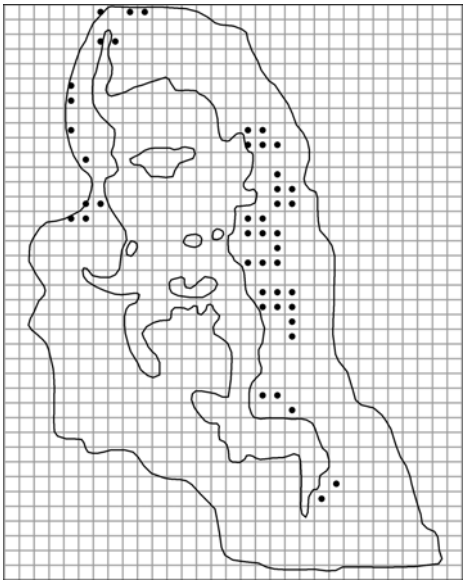

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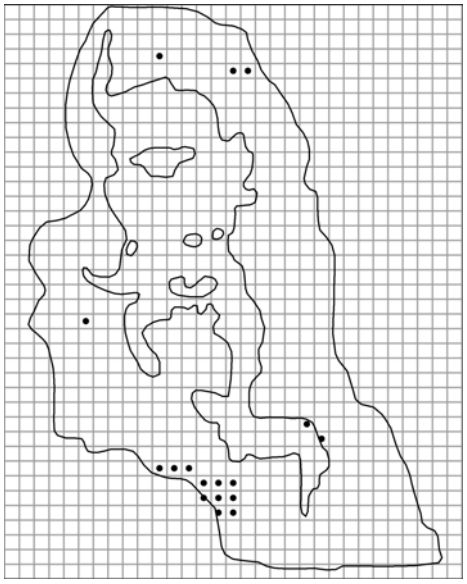

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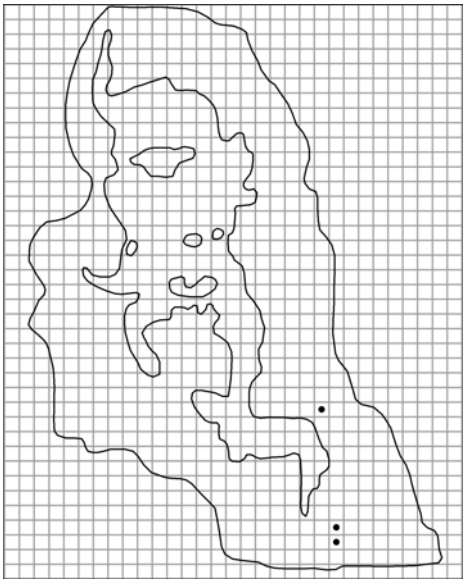

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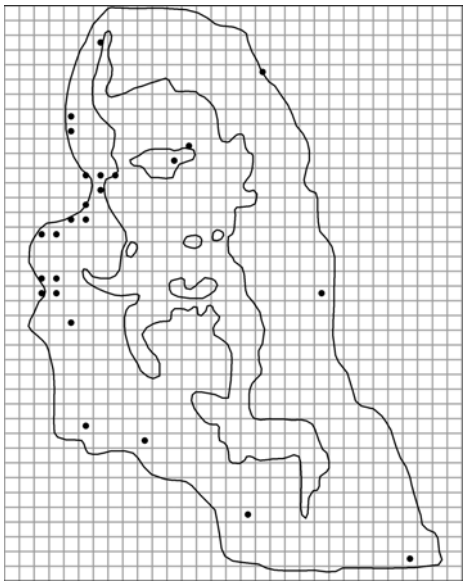

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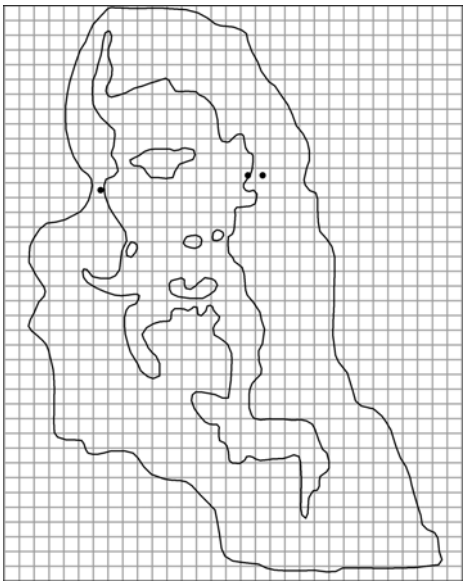

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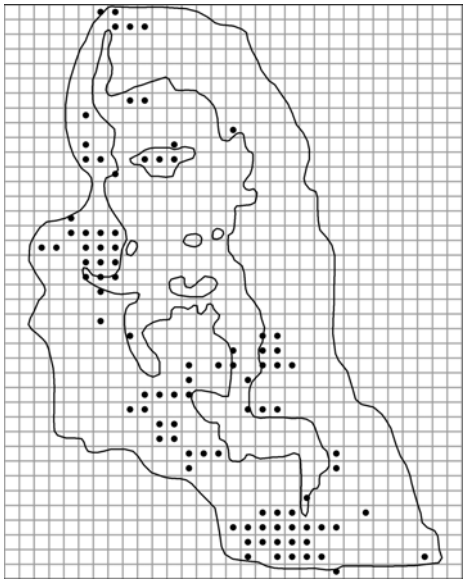

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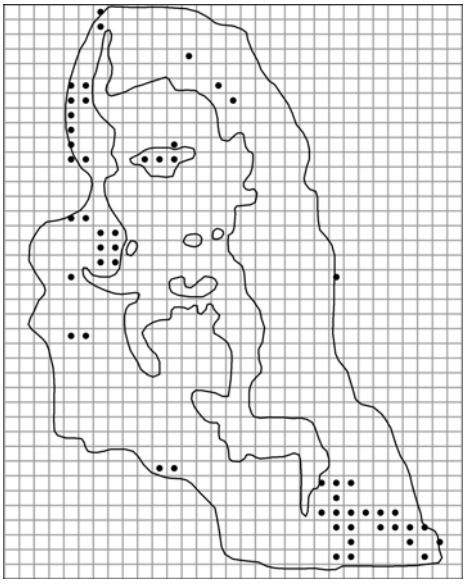

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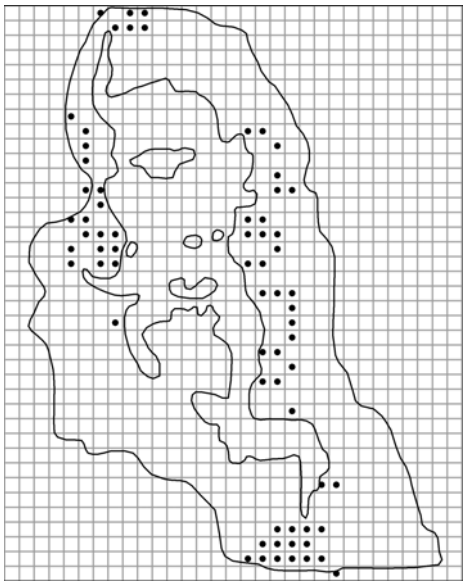

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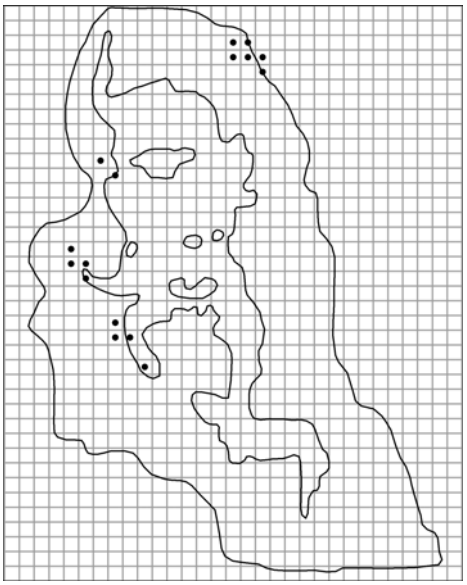

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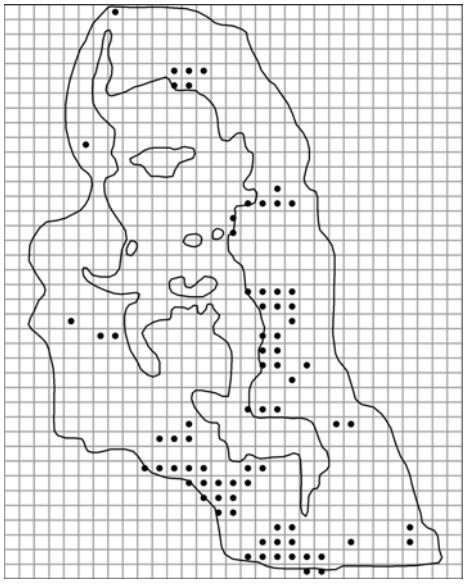

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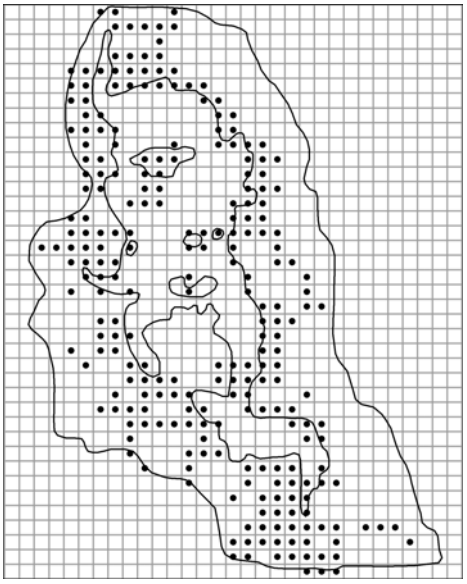

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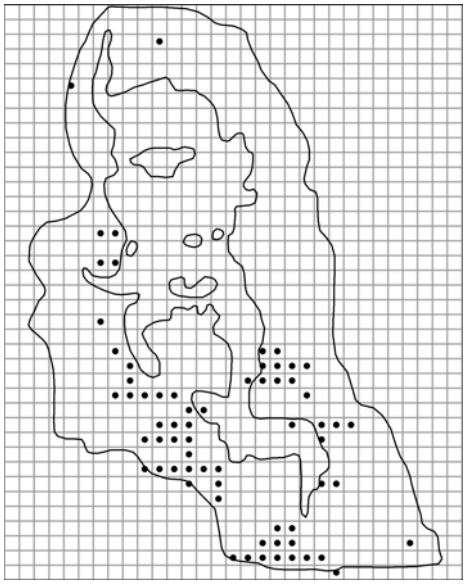

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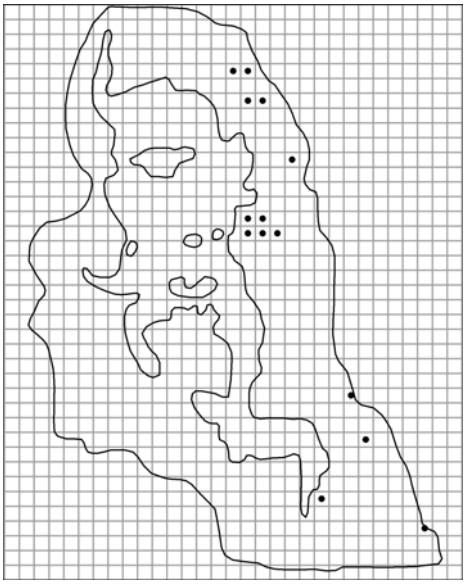

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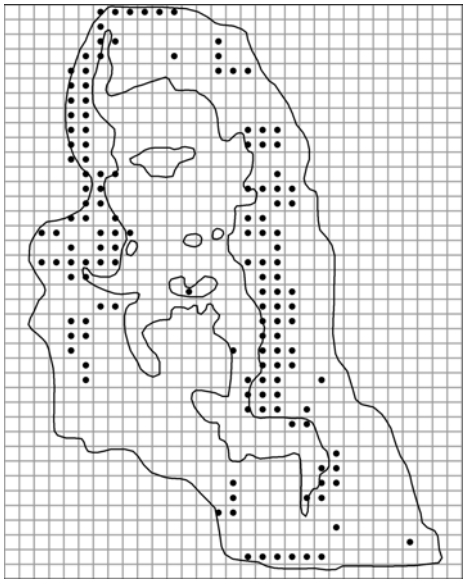

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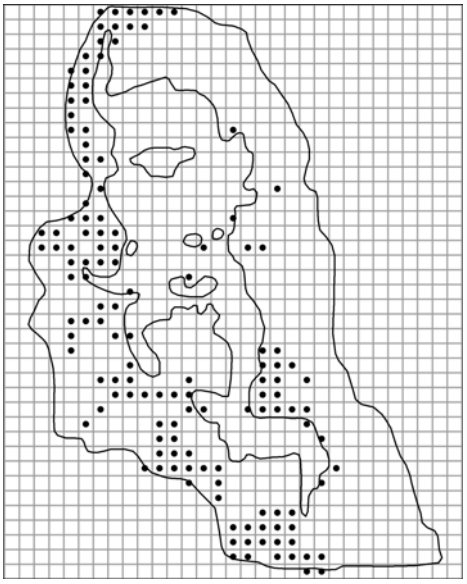

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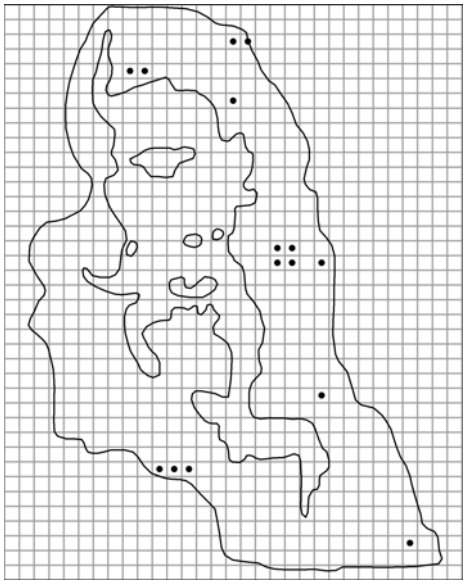

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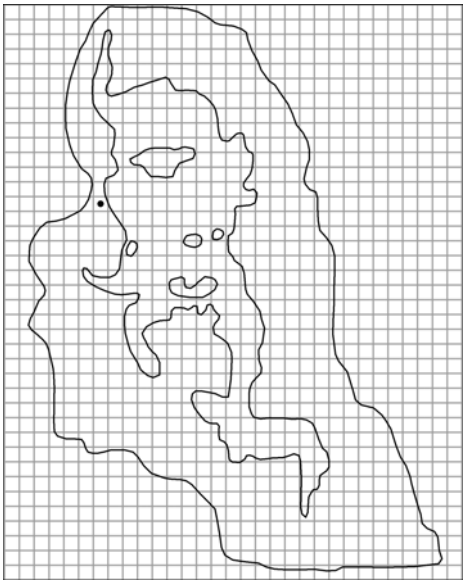

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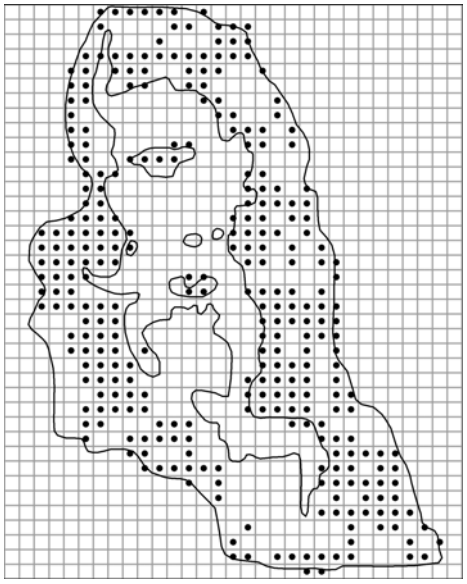

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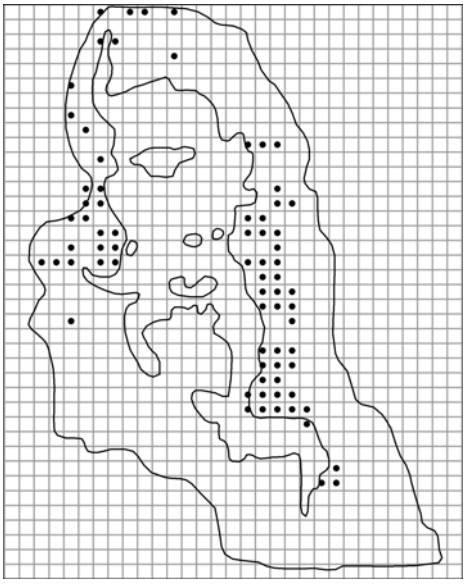

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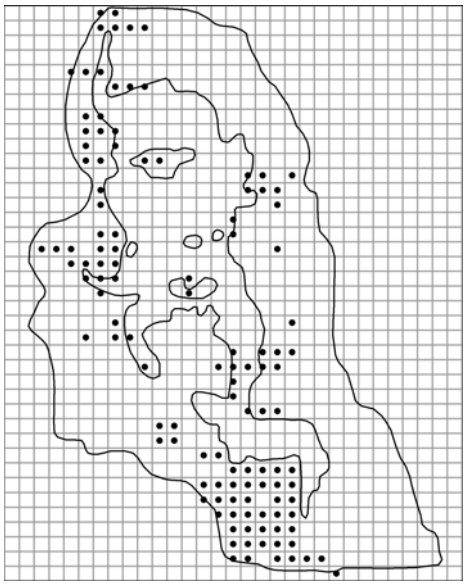

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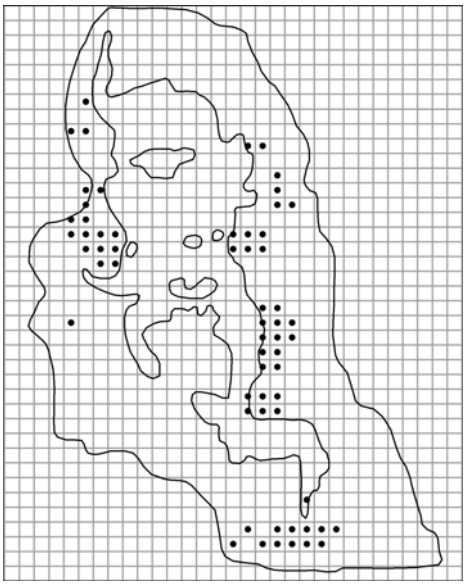

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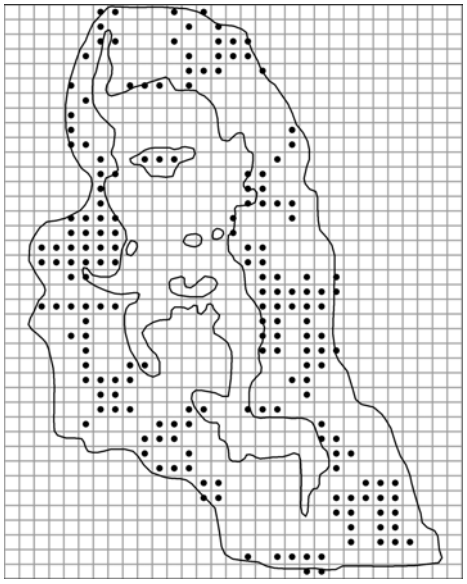

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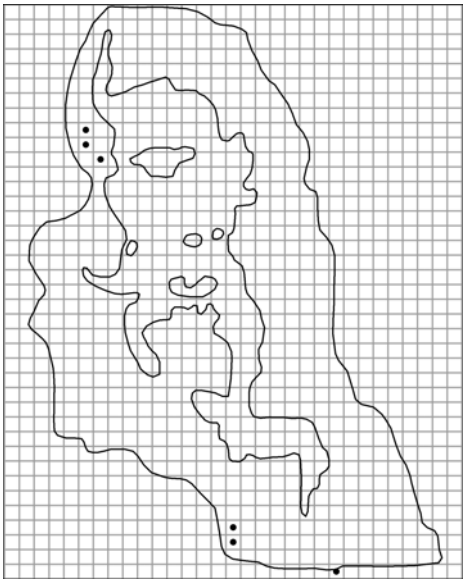

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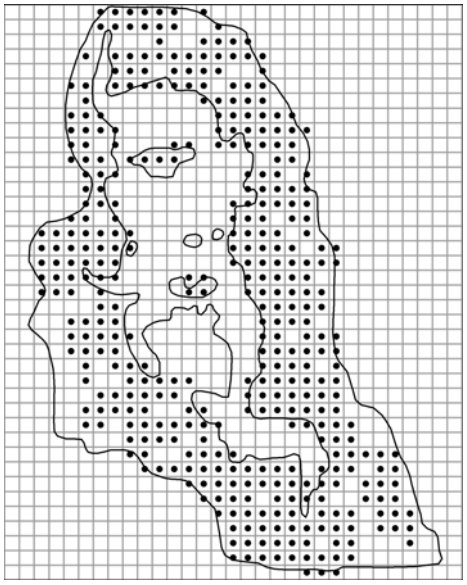

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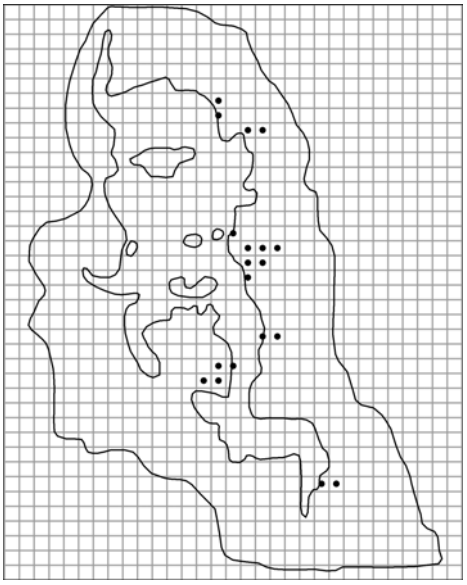

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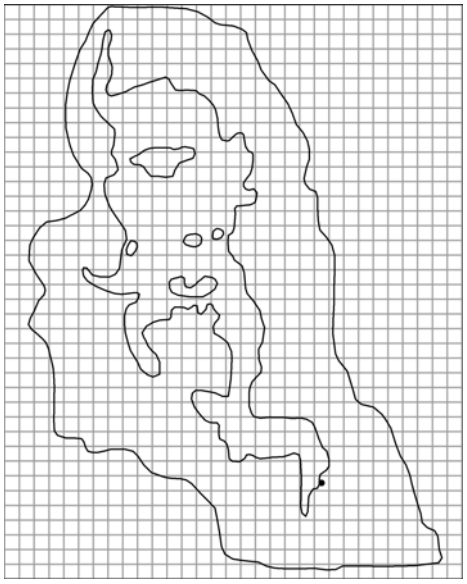

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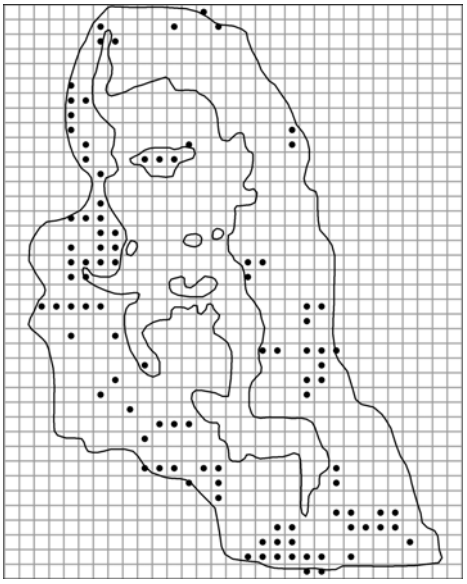

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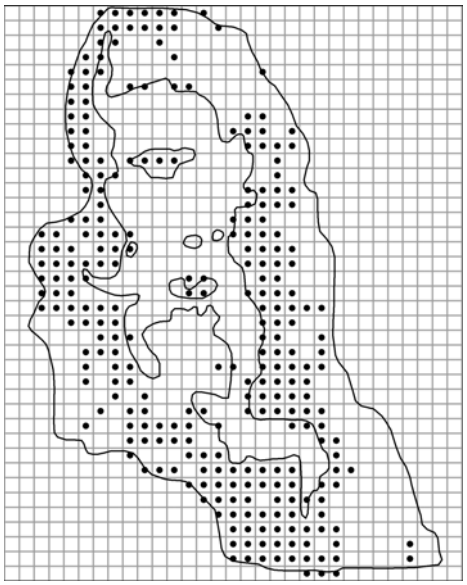

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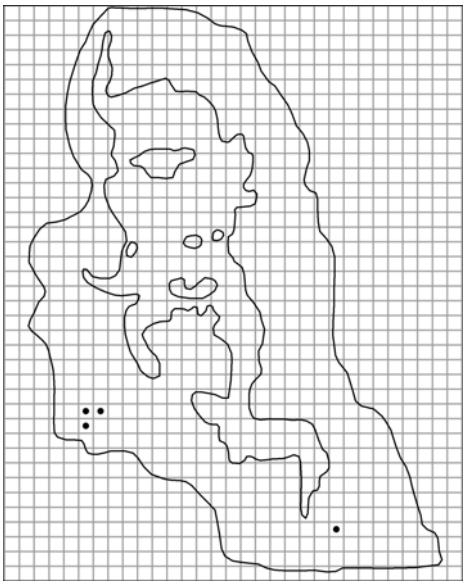

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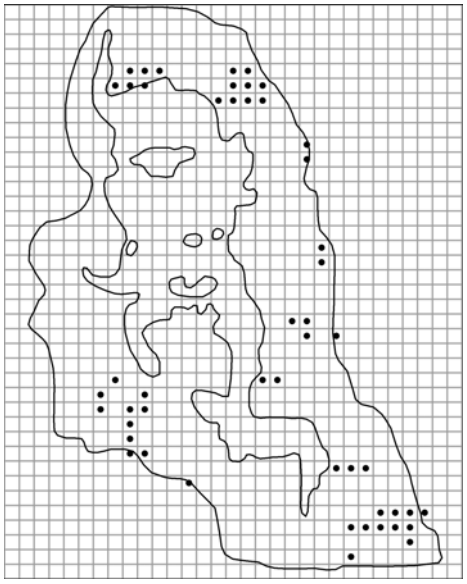

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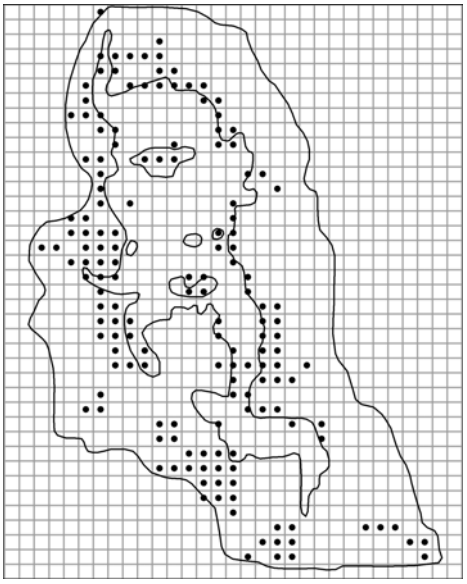

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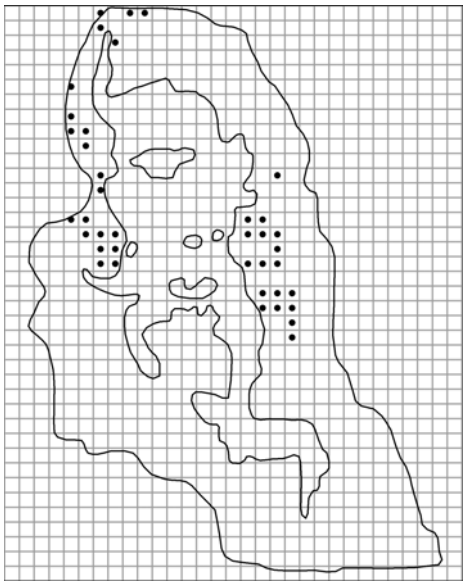

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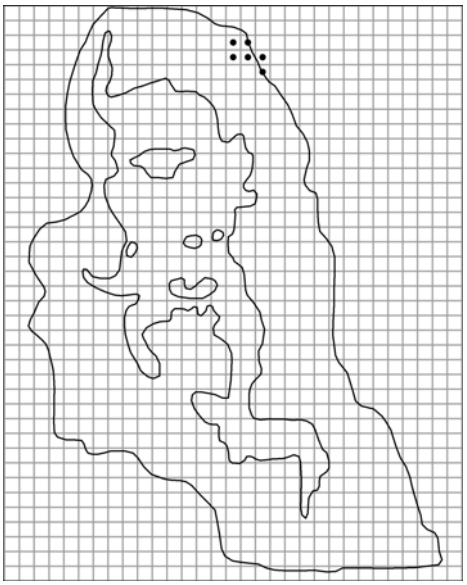
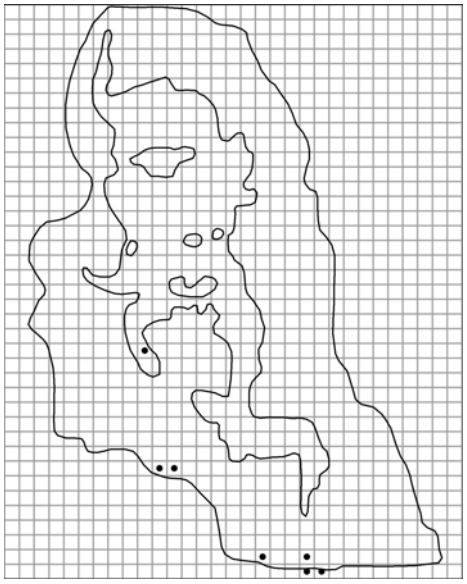


Carex reichenbachii



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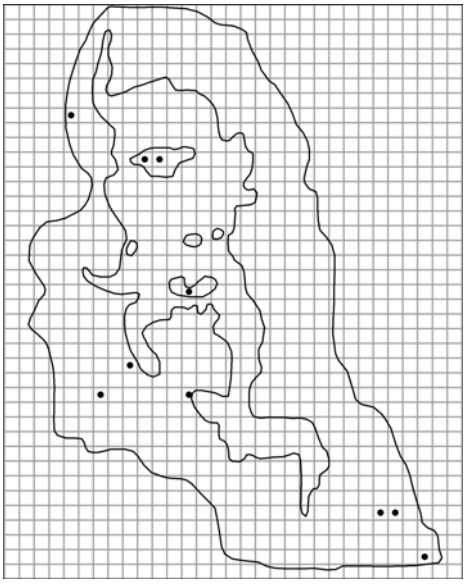

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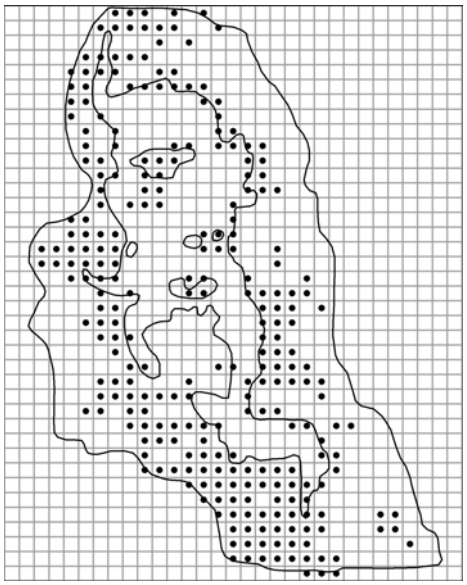

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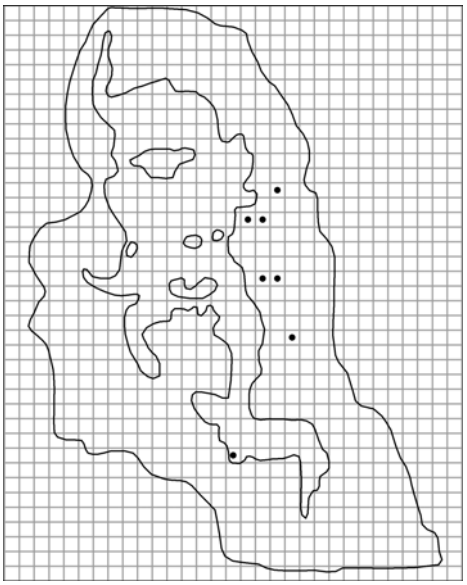

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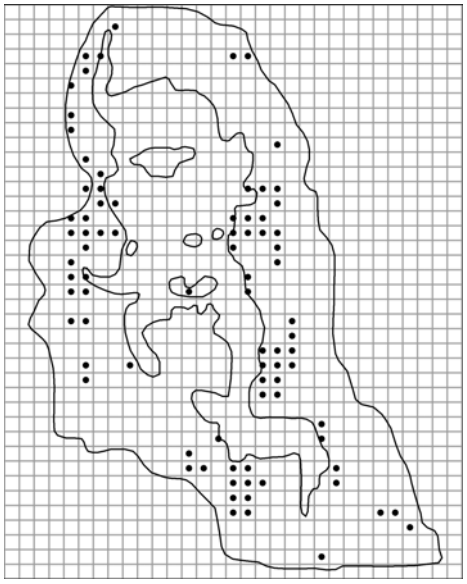

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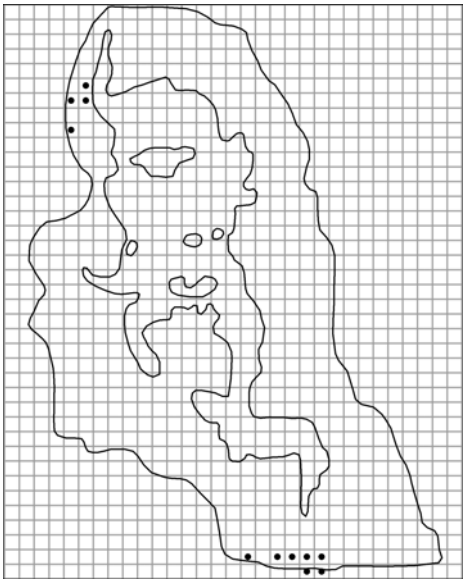

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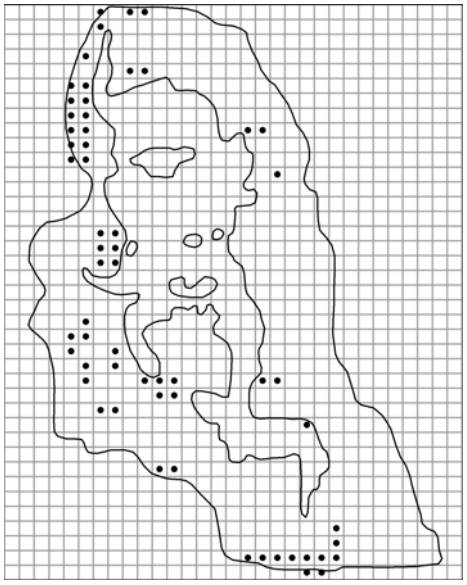

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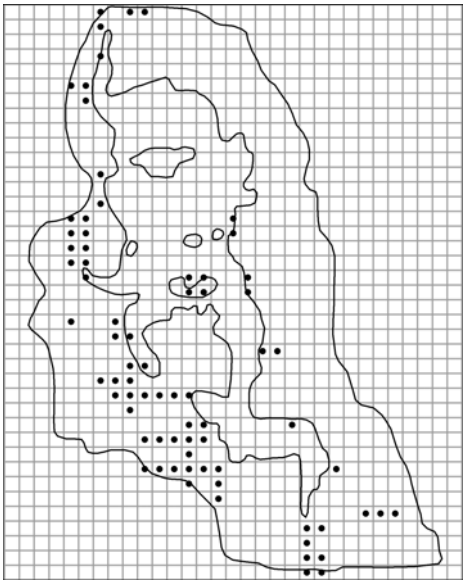

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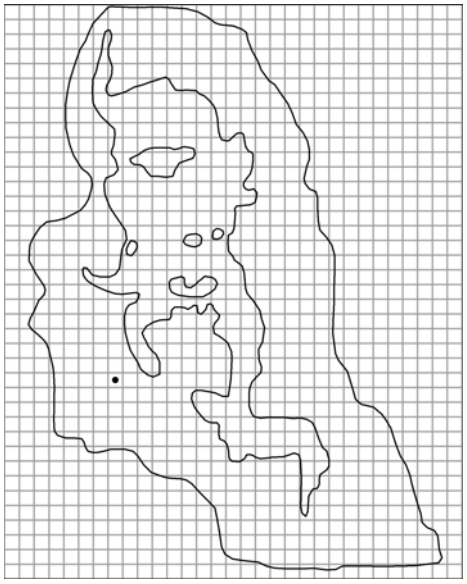

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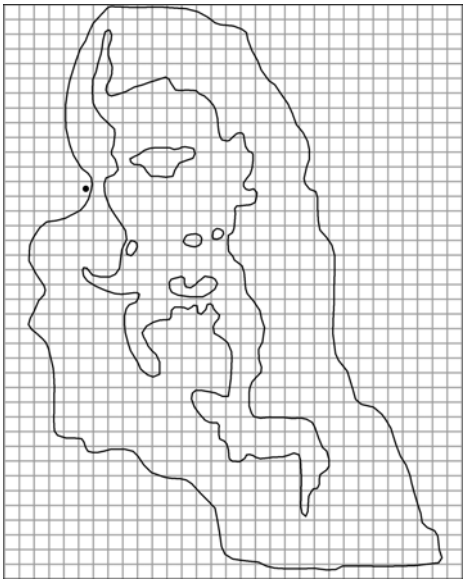
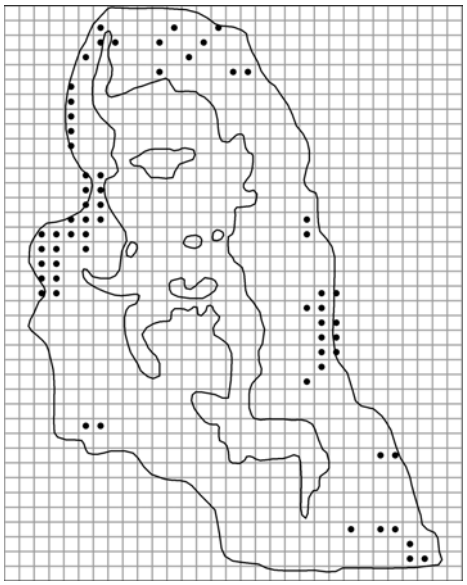


Carlina vulgaris



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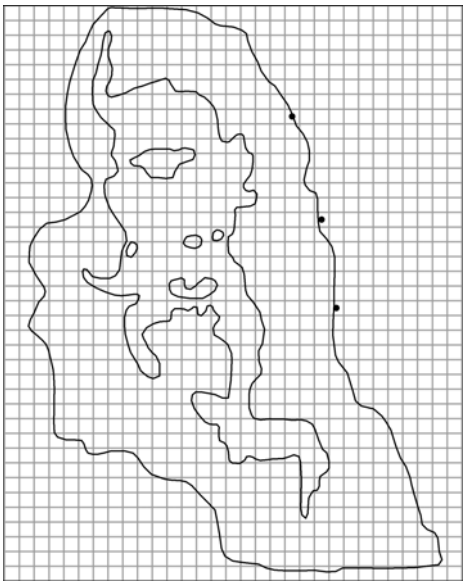
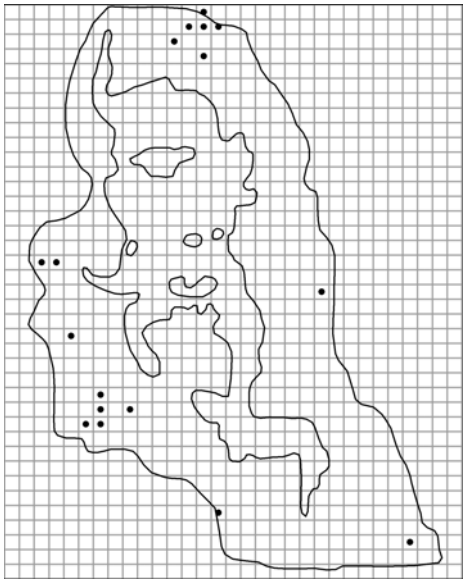
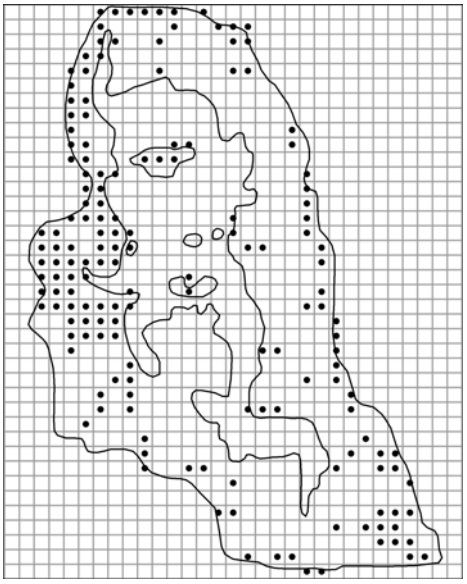


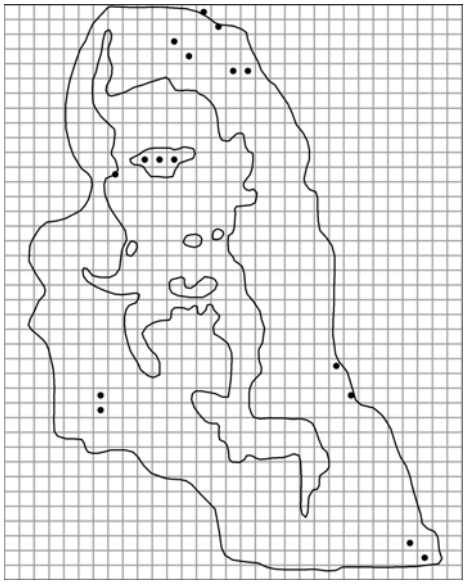
Catabrosa aquatica



Centaurea cyanus



Centaurea jacea



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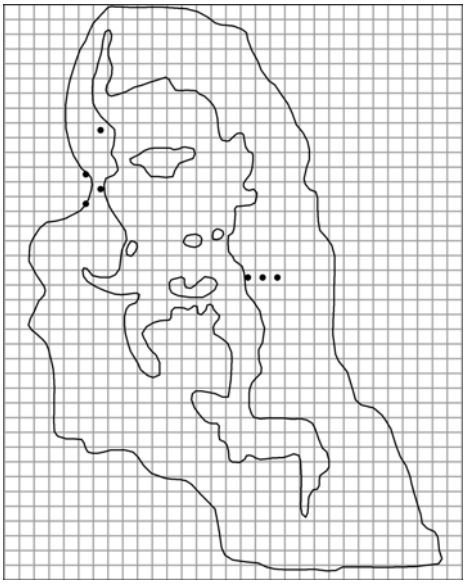
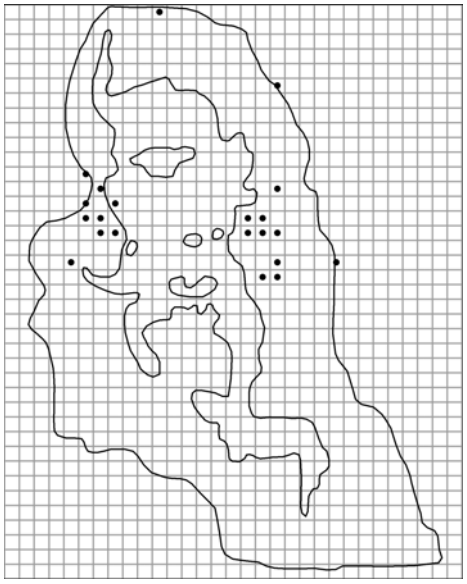


Centaurium erythraea



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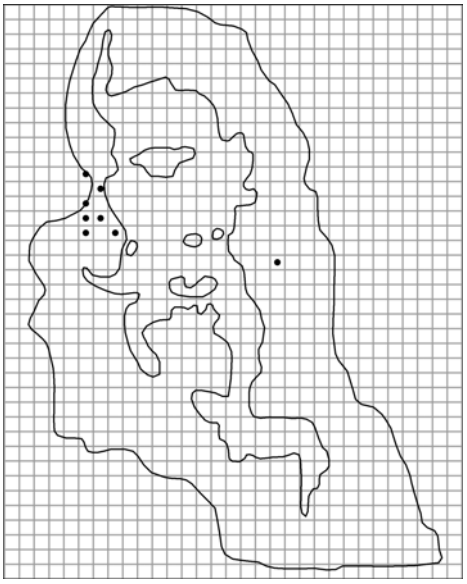

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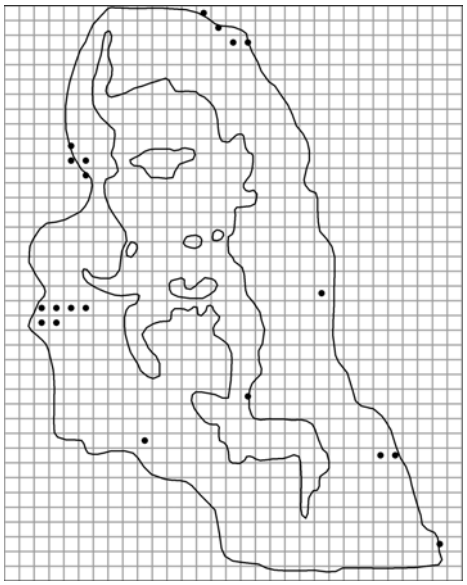
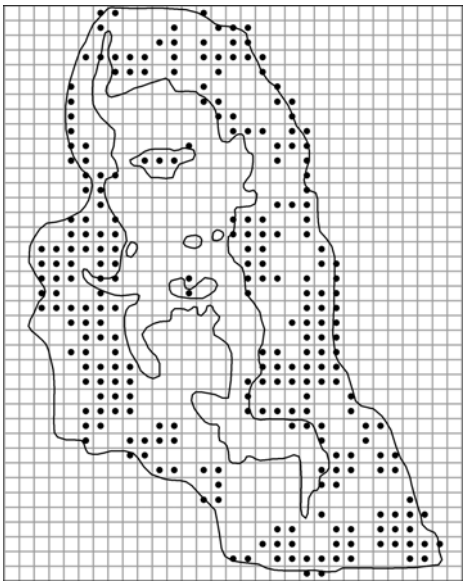


Cerastium arvense



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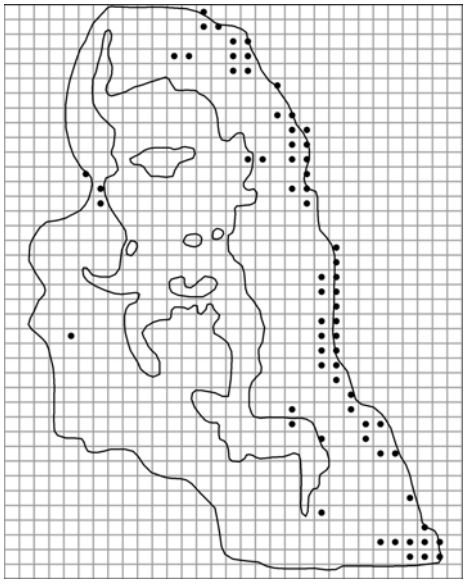

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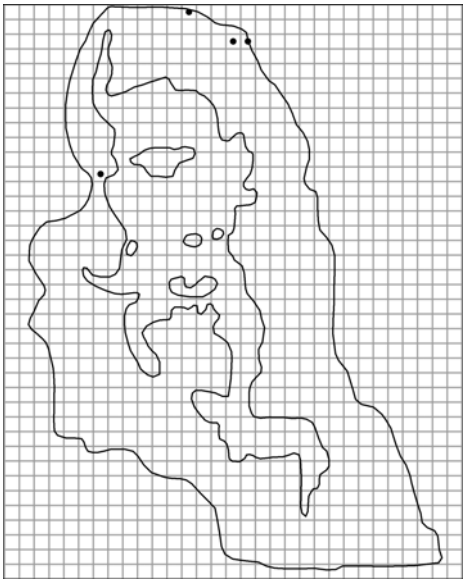

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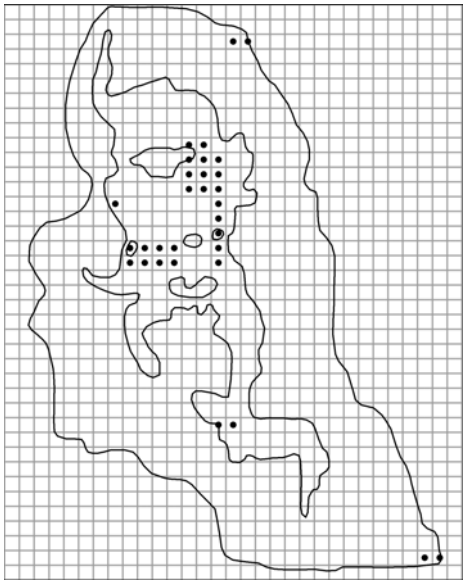
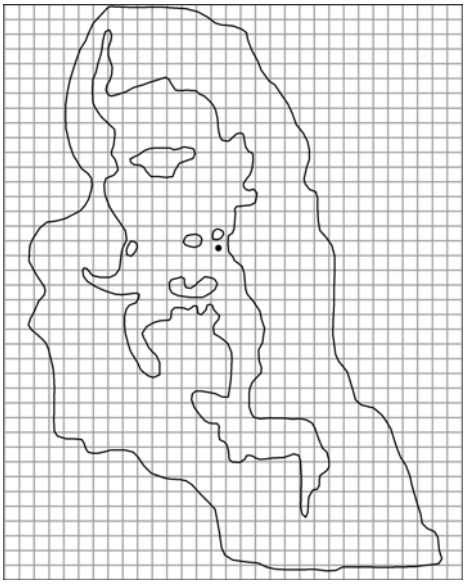
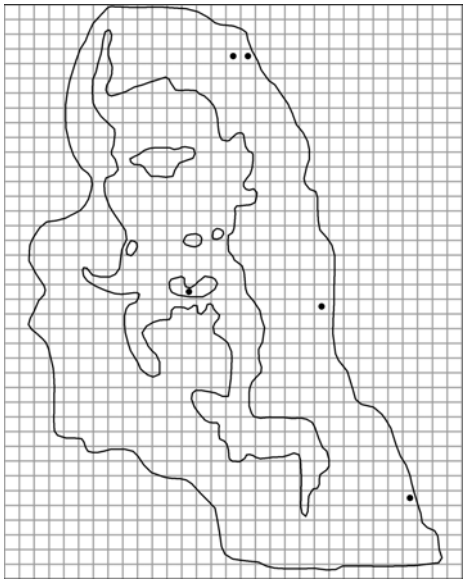


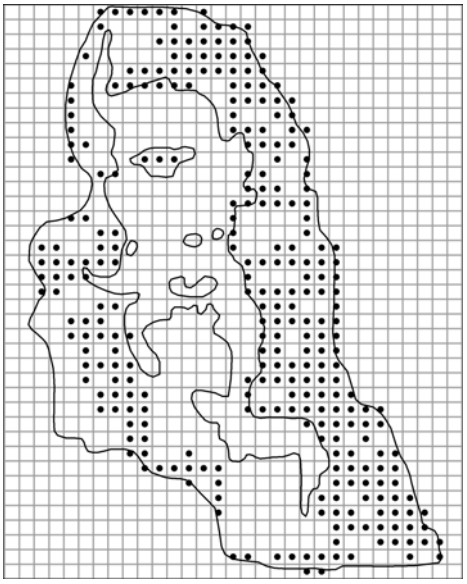
Ceratophyllum demersum



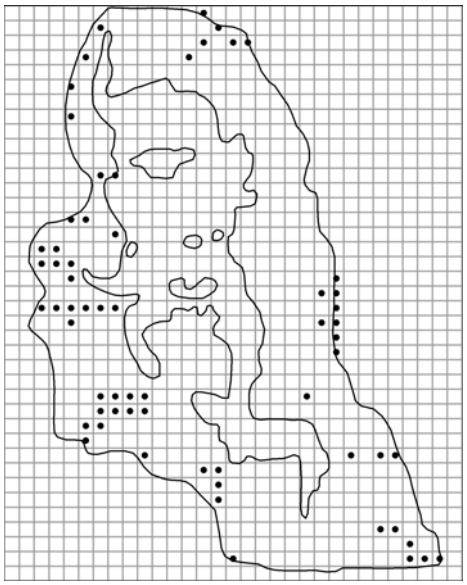
Ceratophyllum submersum



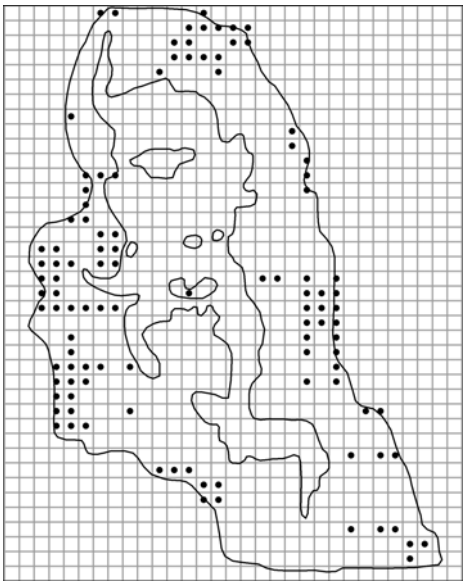
Chaenorhinum minus



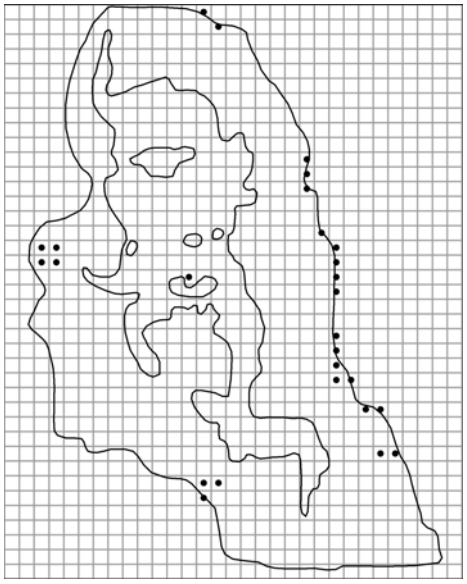
Chamaenerion angustifolium



Chelidonium majus



Chenopodium album



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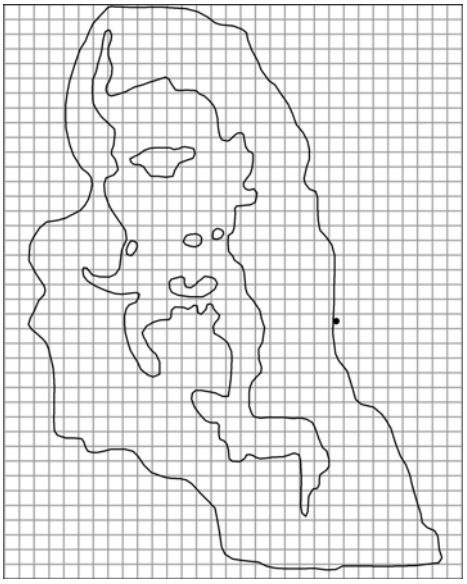
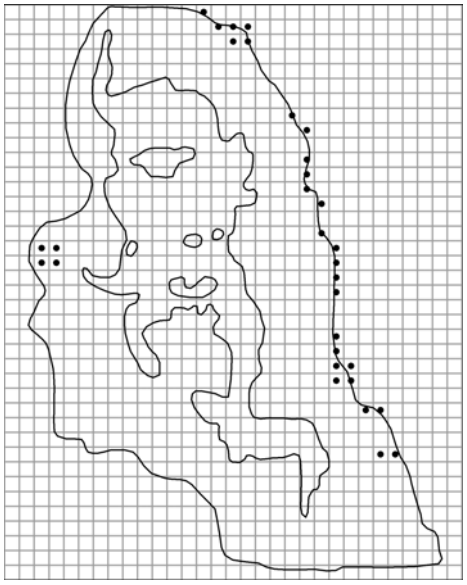


Chenopodium × pseudostriatum



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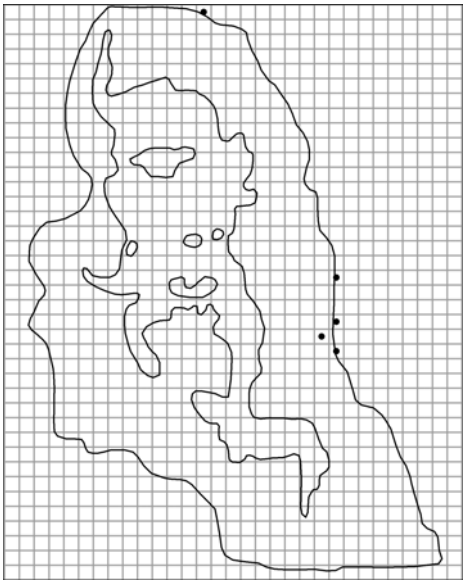

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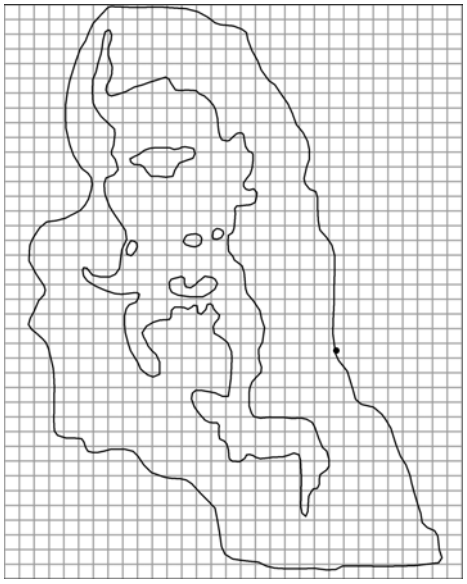

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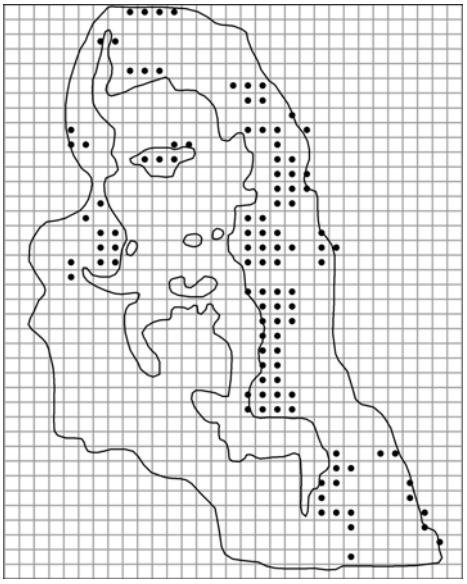

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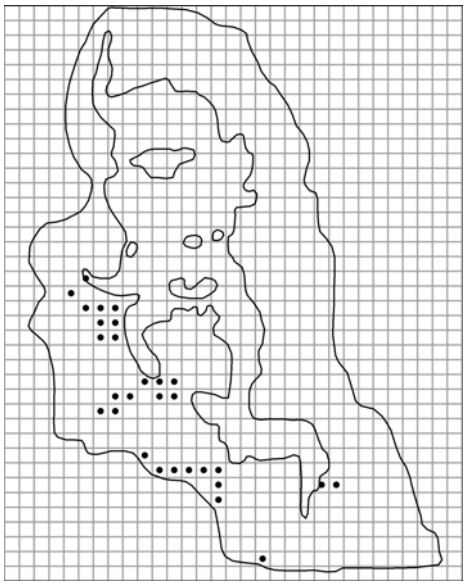
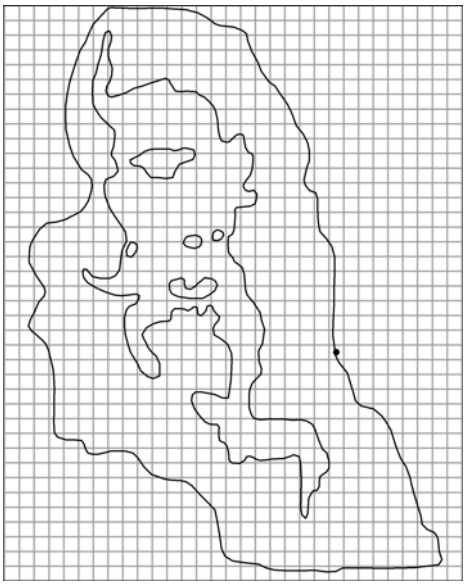


Chrysosplenium alternifolium



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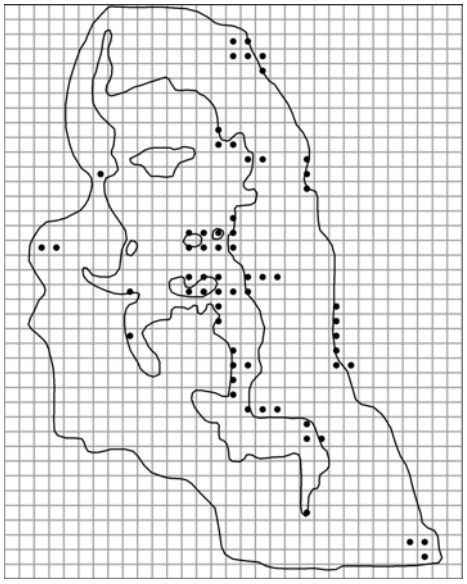

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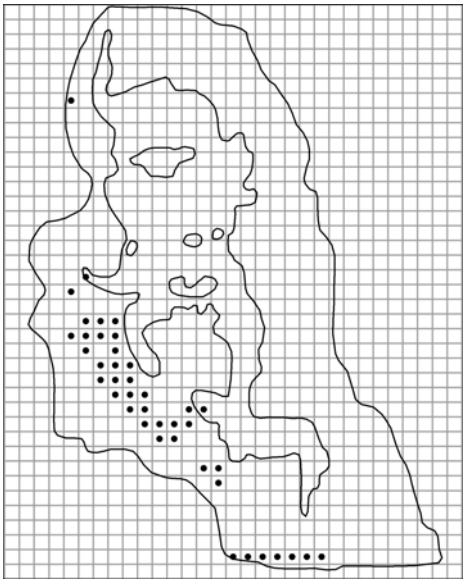
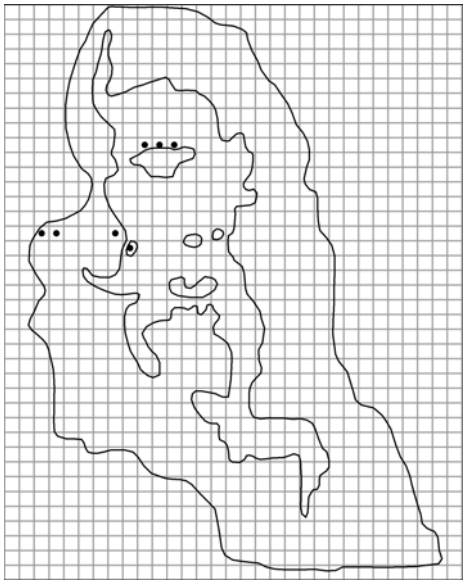
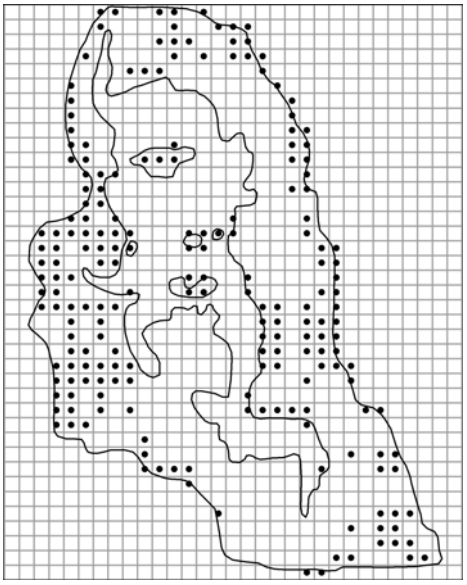


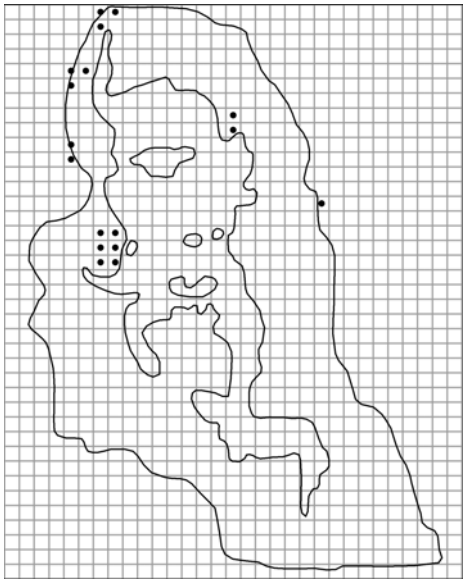
Circaea alpina



Cirsium acaule



Cirsium arvense



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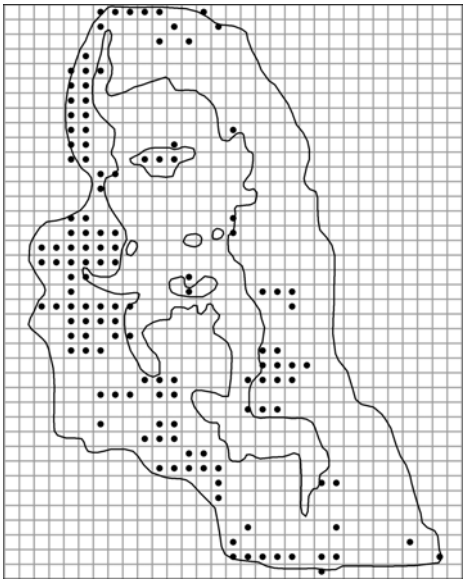

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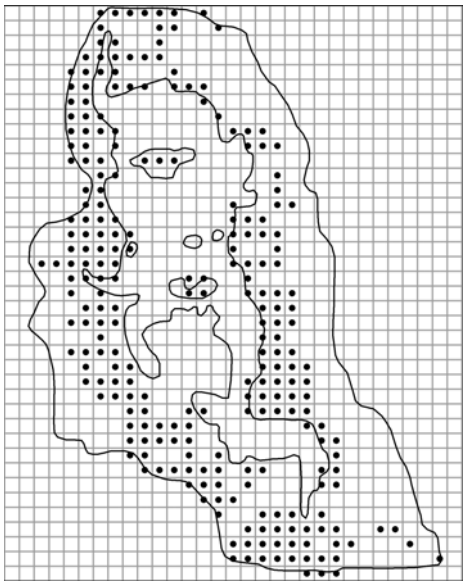
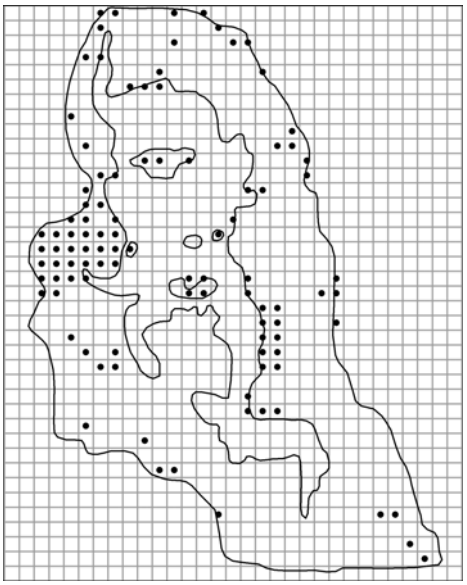
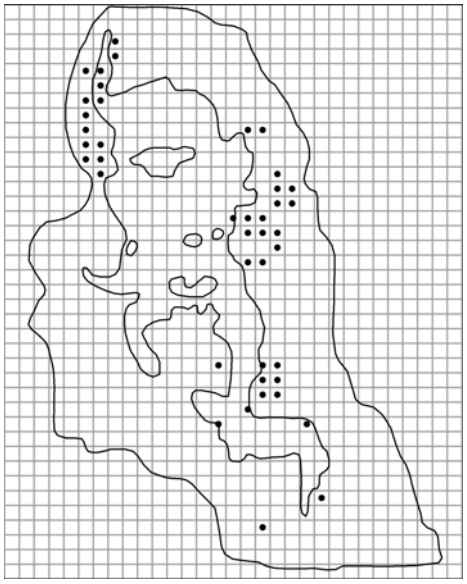


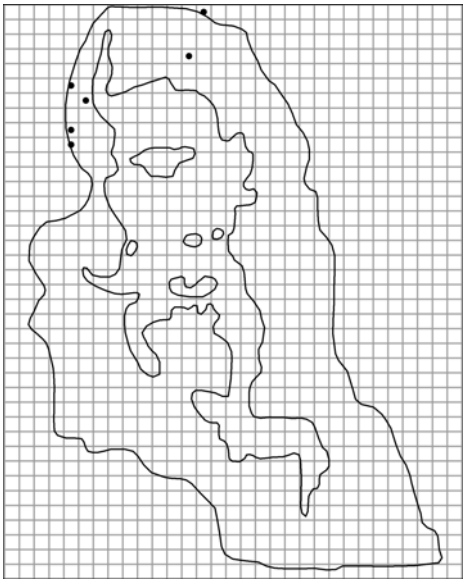
Cirsium palustre



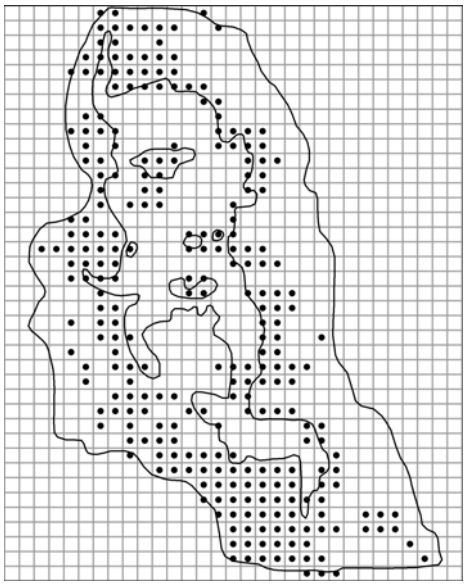
Cirsium vulgare



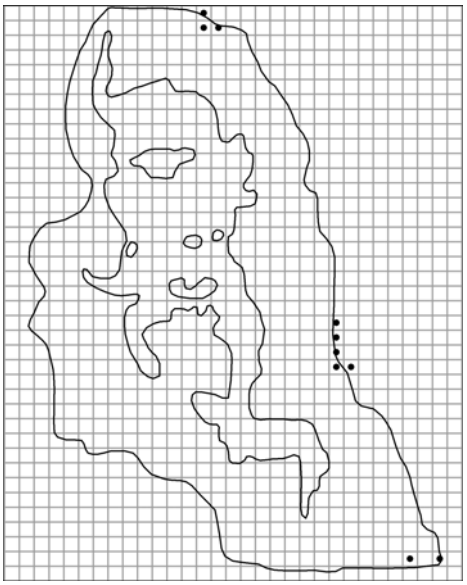
Cladium mariscus



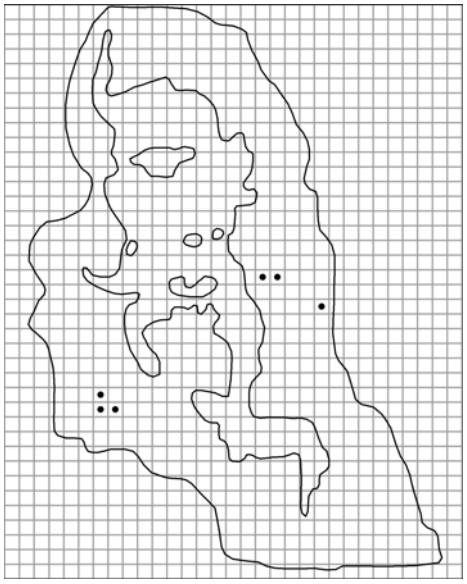
Clinopodium vulgare



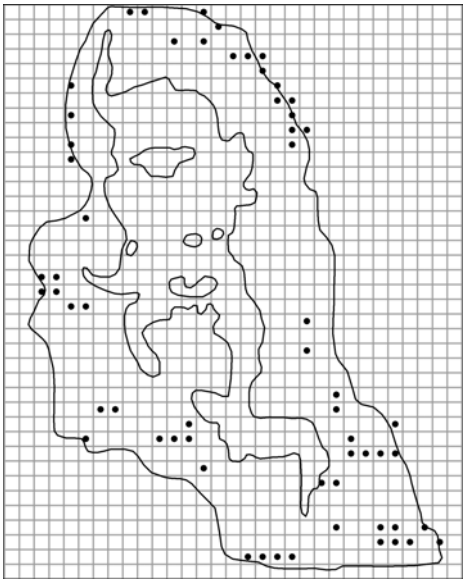
Comarum palustre



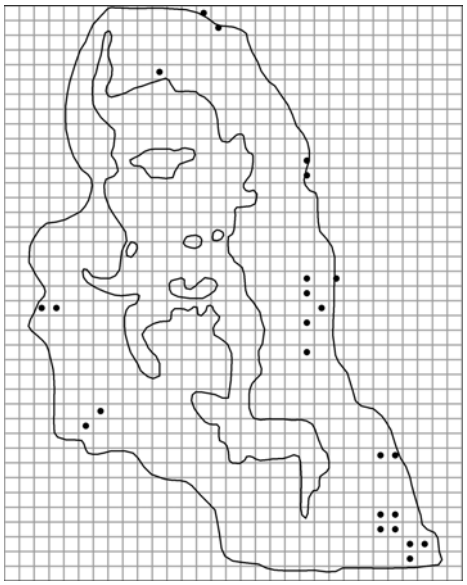
Conium maculatum



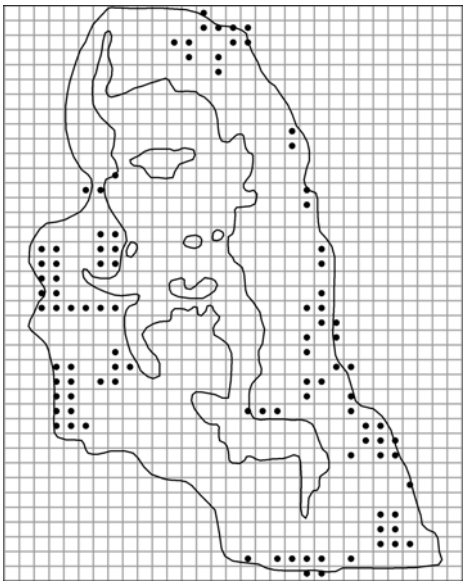
Consolida regalis



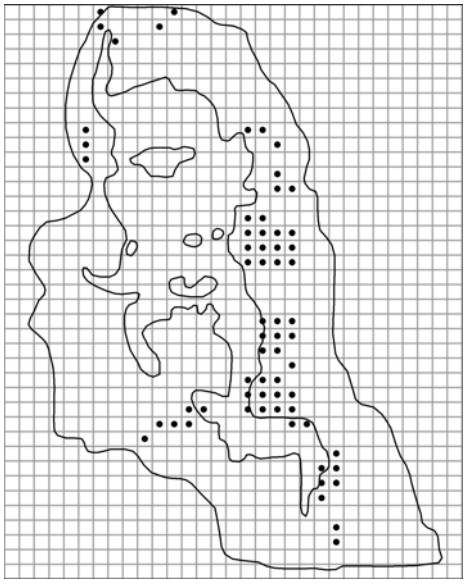
Convallaria majalis



Convolvulus arvensis



Conyza canadensis



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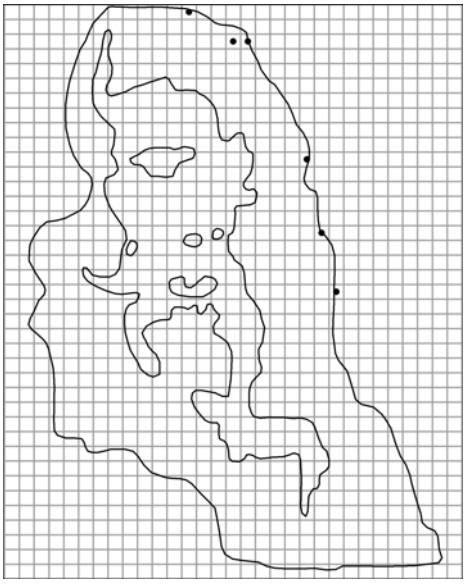

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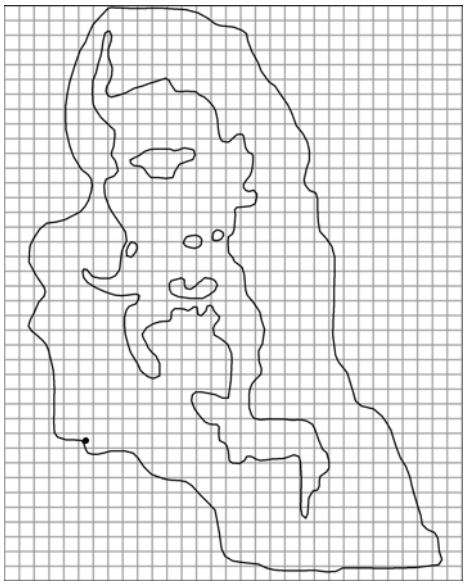
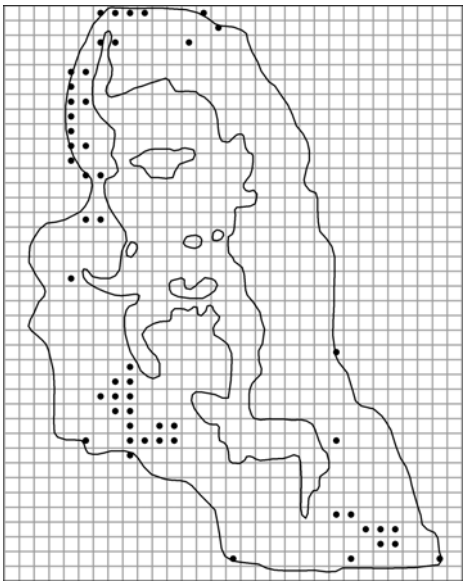
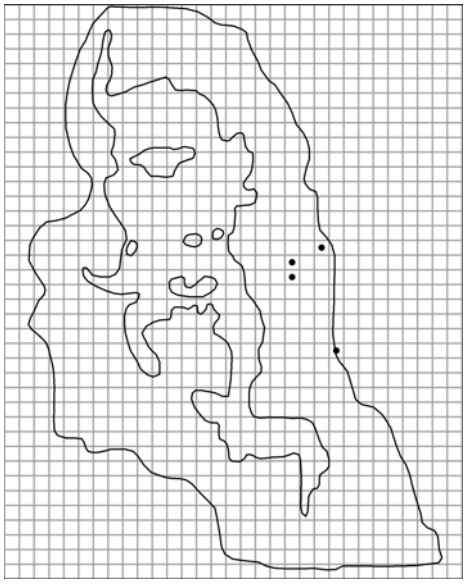


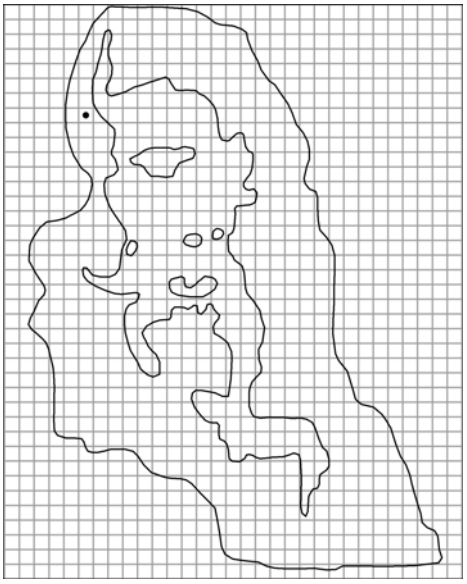
Corydalis solida



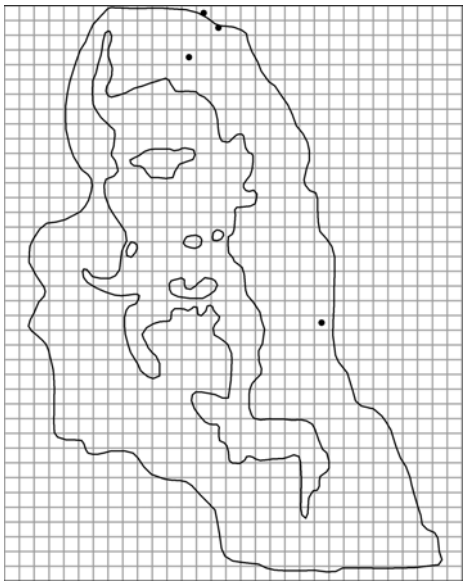
Corylus avellana



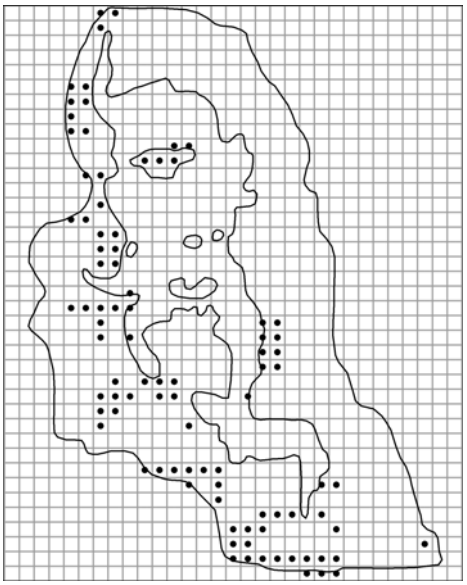
Corynephorus canescens



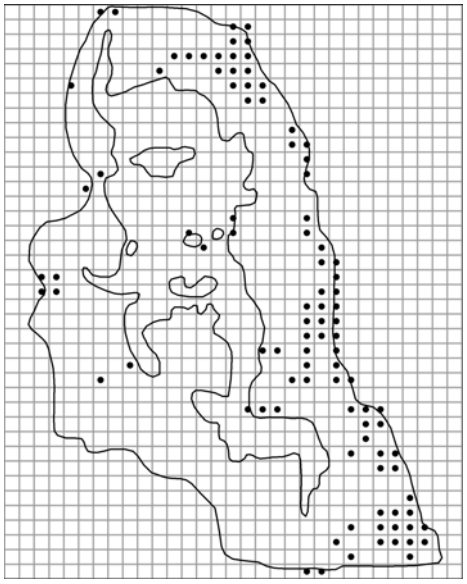
Crataegus alemanniensis var. alemanniensis



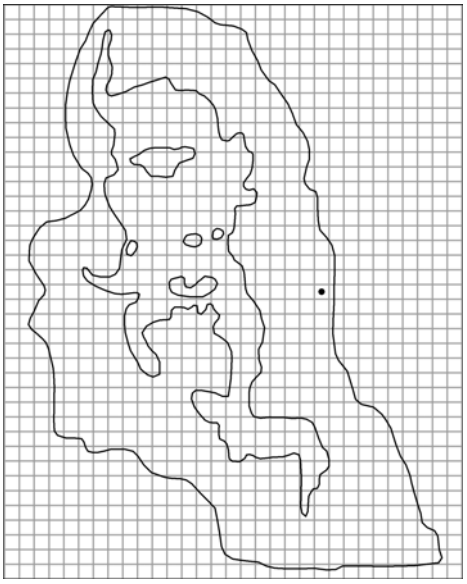
Crepis biennis



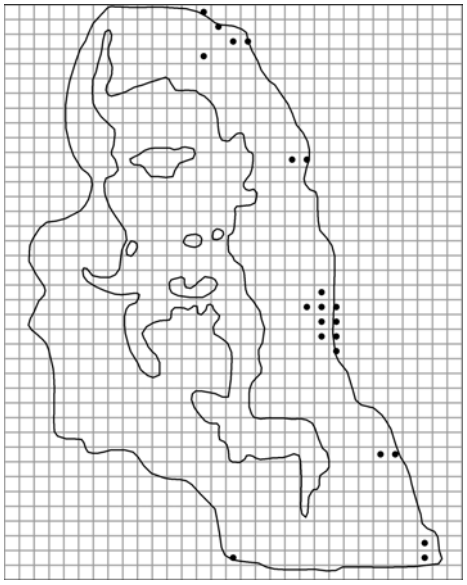
Crepis paludosa



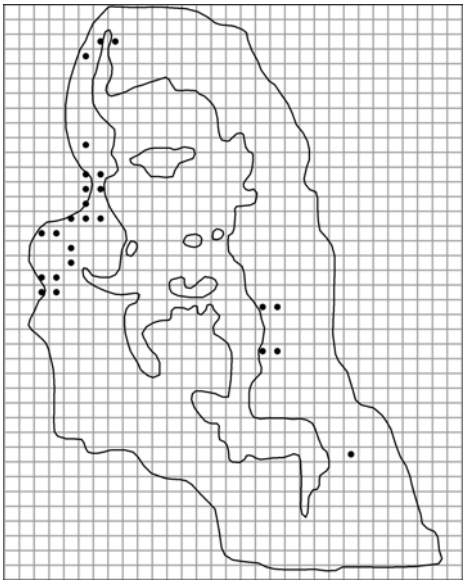
Crepis tectorum



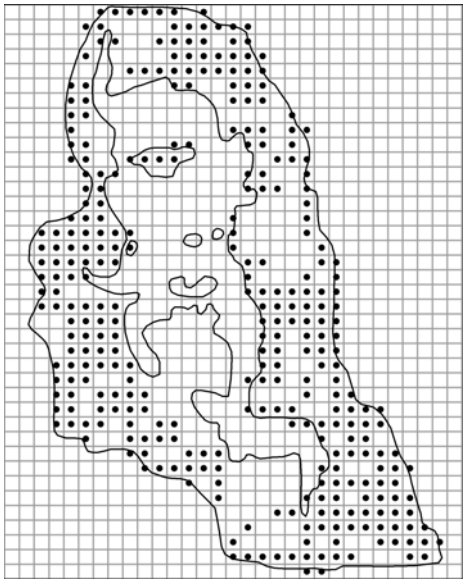
Cuscuta epithymum



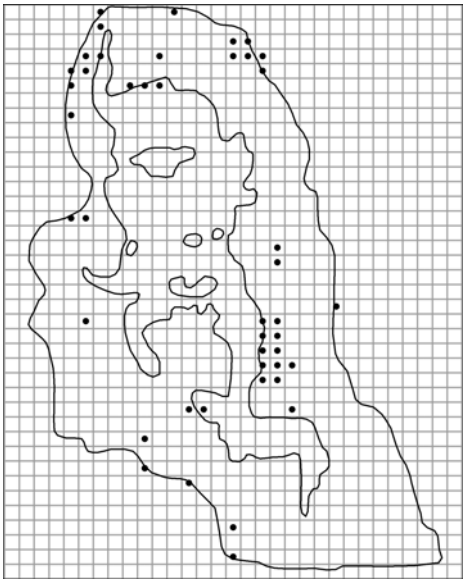
Cynoglossum officinale



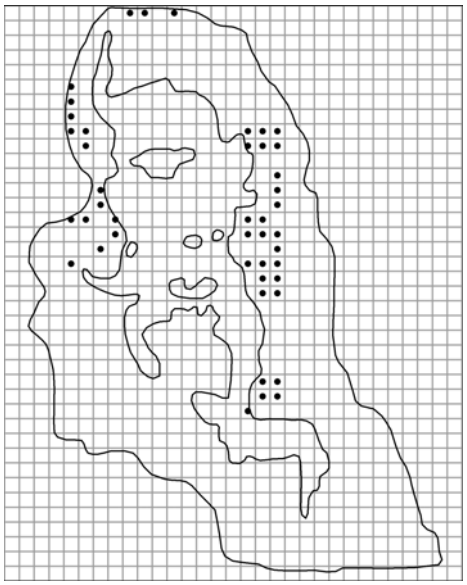
Cynosurus cristatus



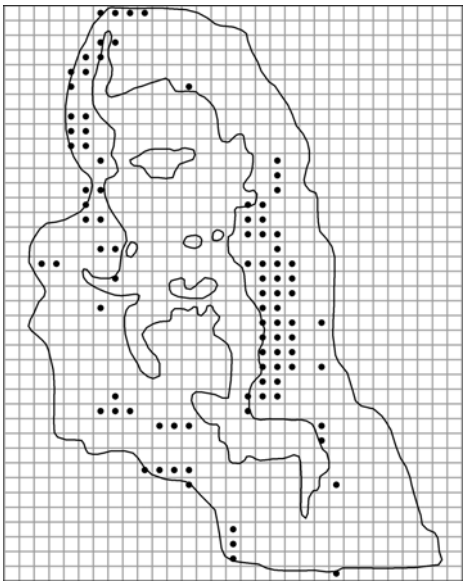
Dactylis glomerata



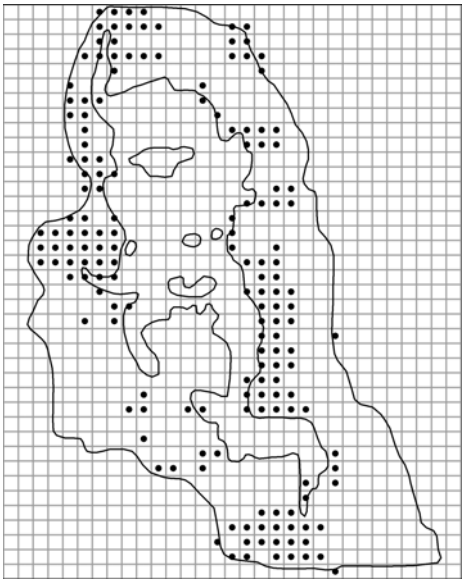
Dactylorhiza baltica



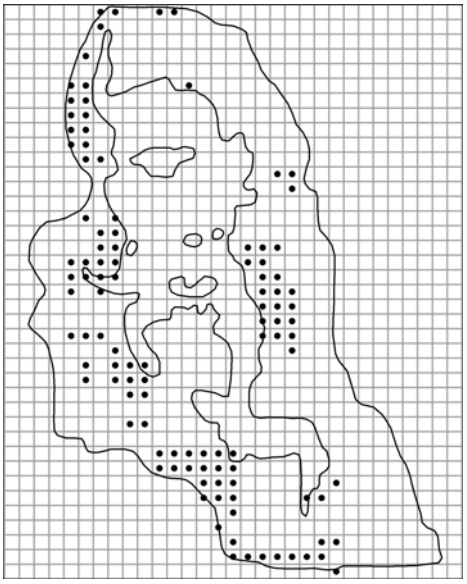
Dactylorhiza cruenta



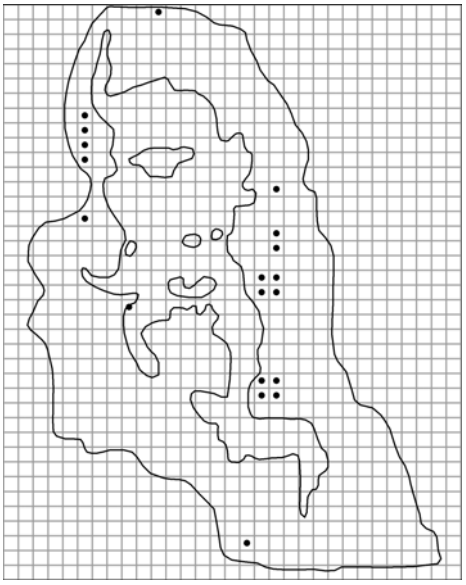
Dactylorhiza fuchsii



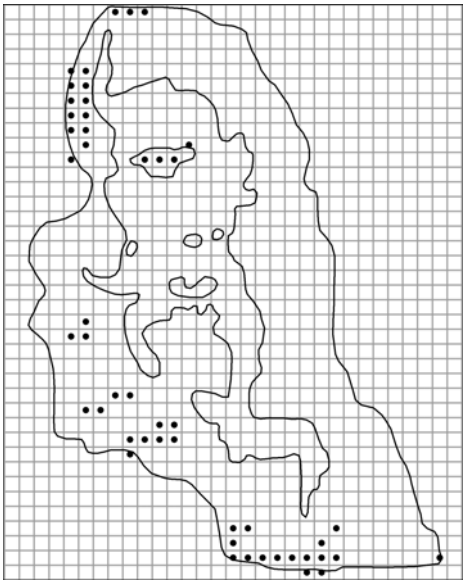
Dactylorhiza incarnata



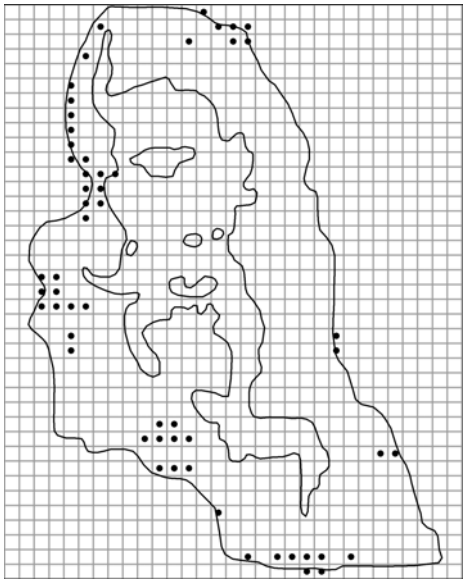
Dactylorhiza maculata



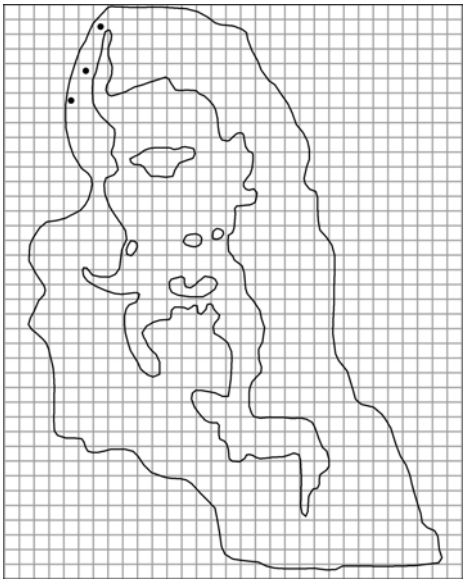
Dactylorhiza ochroleuca



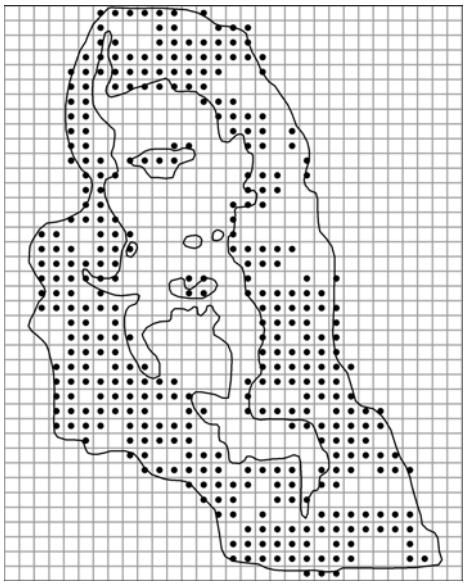
Daphne mezereum



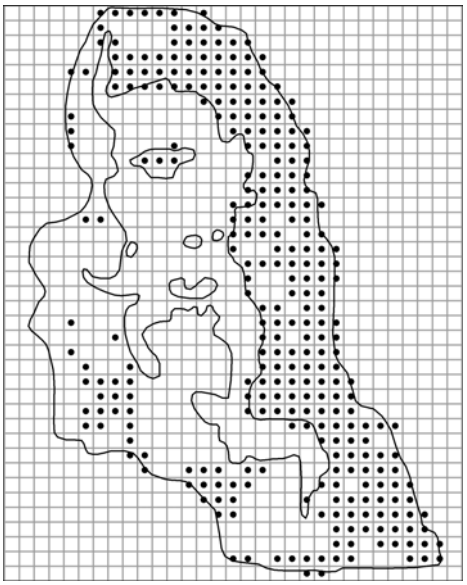
Daucus carota



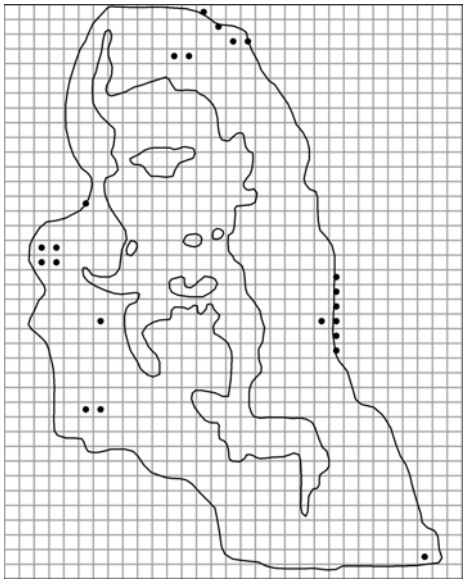
Dentaria bulbifera



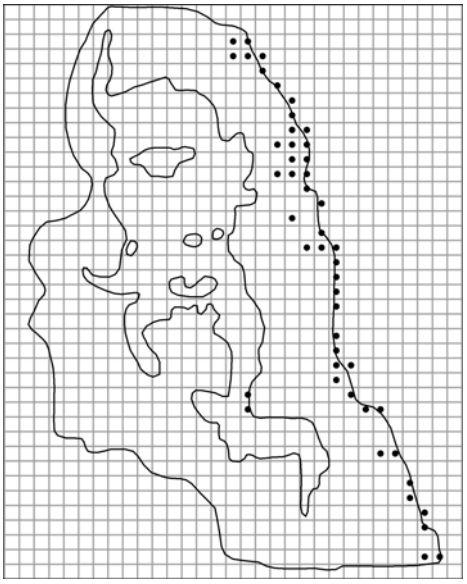
Deschampsia cespitosa



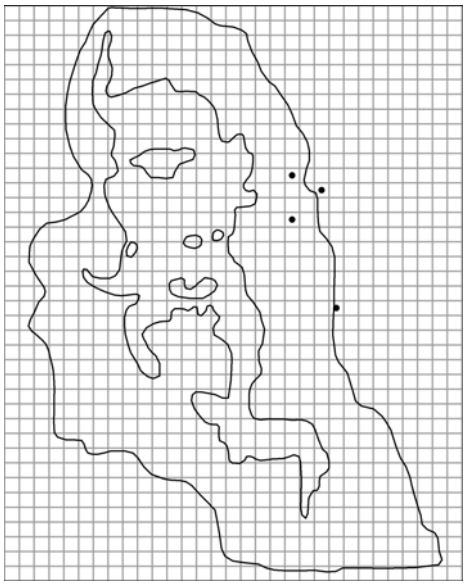
Deschampsia flexuosa



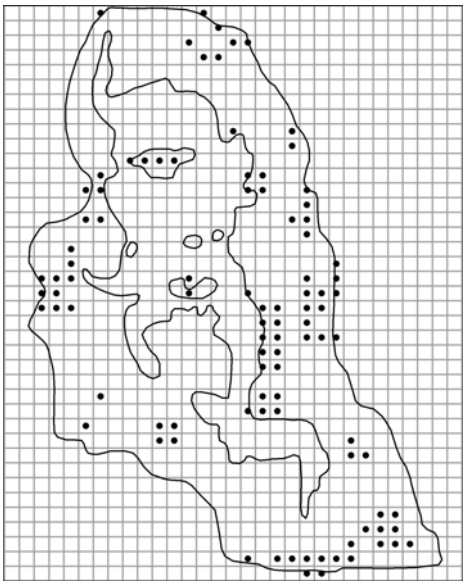
Descurainia sophia



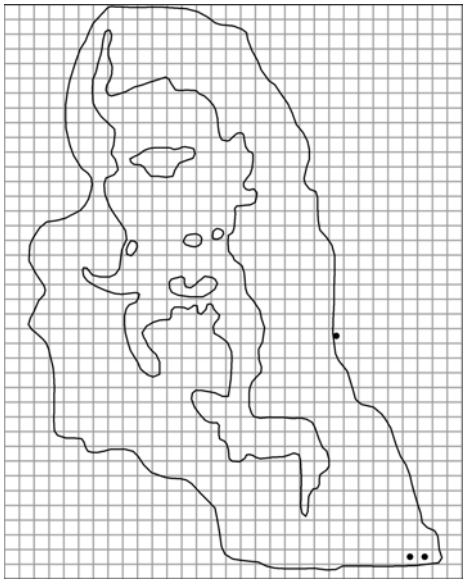
Dianthus arenarius subsp. arenarius



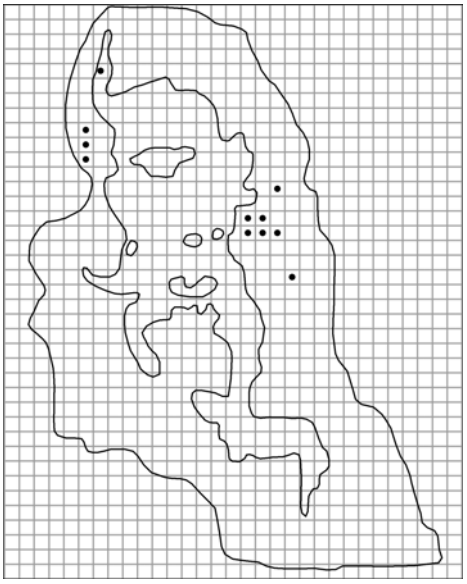
Dianthus arenarius subsp. borussicus



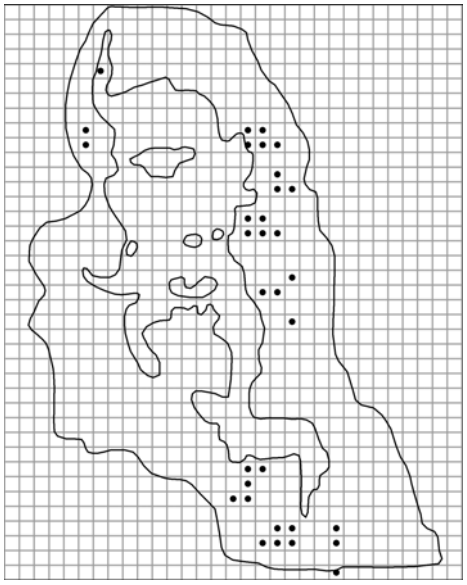
Dianthus deltoides



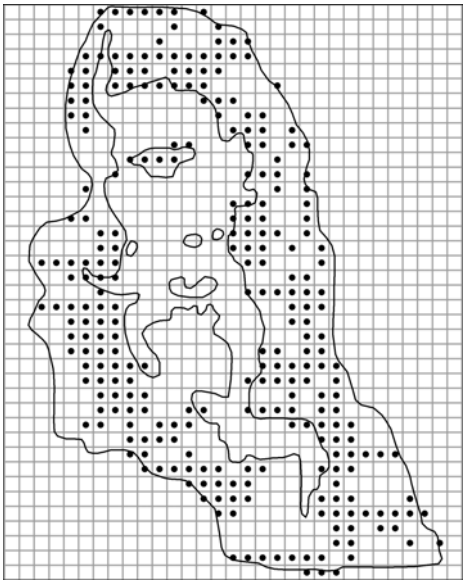
Diplotaxis muralis



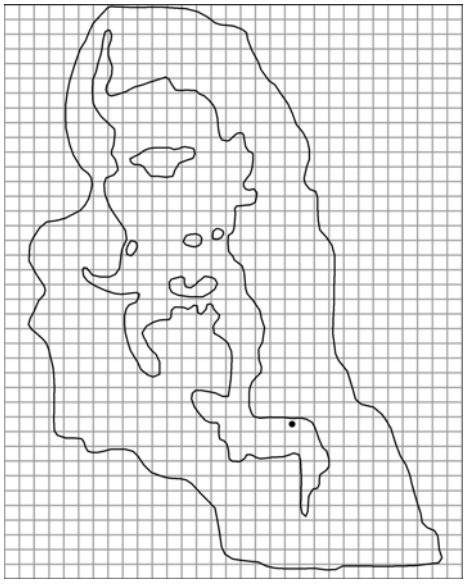
Drosera anglica



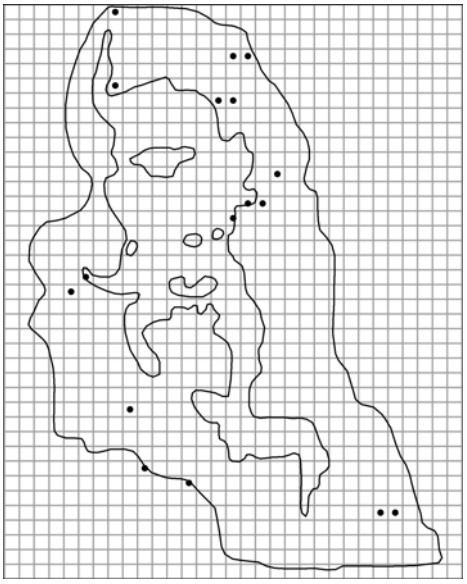
Drosera rotundifolia



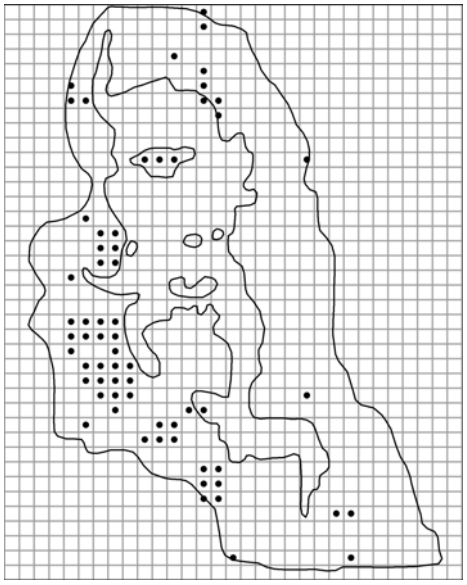
Dryopteris carthusiana



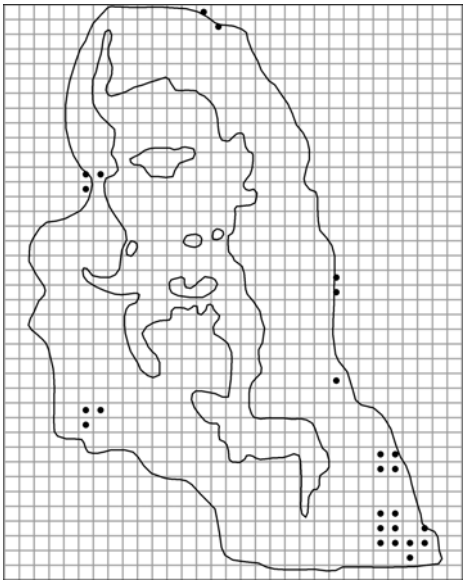
Dryopteris cristata



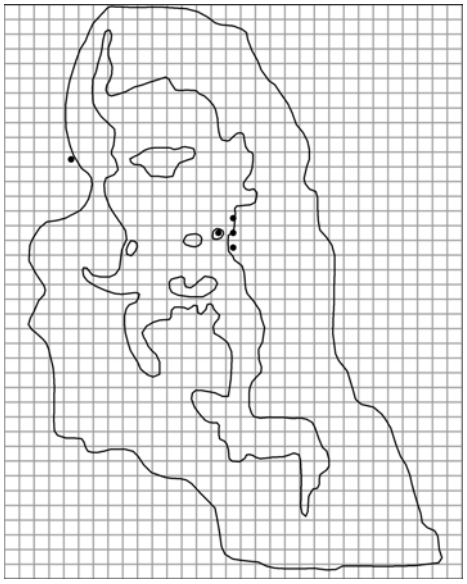
Dryopteris expansa



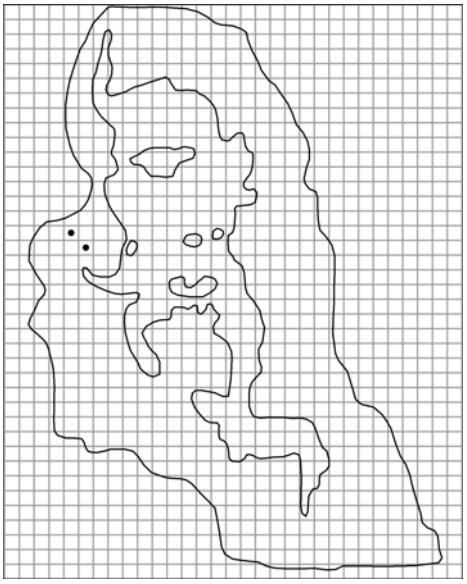
Dryopteris filix-mas



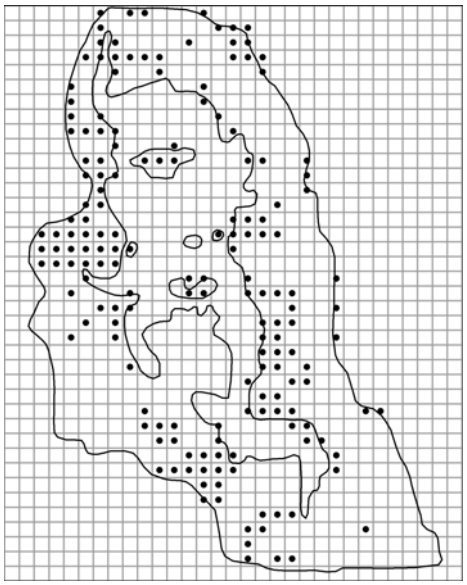
Echium vulgare



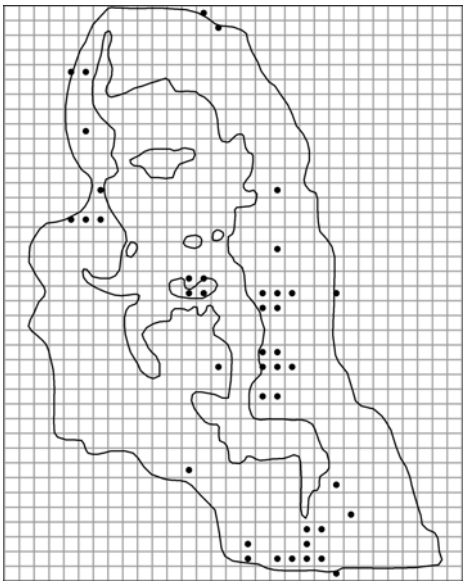
Eleocharis acicularis



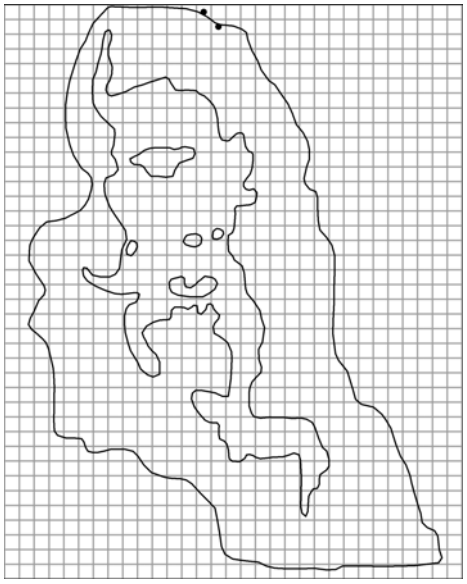
Eleocharis mamillata



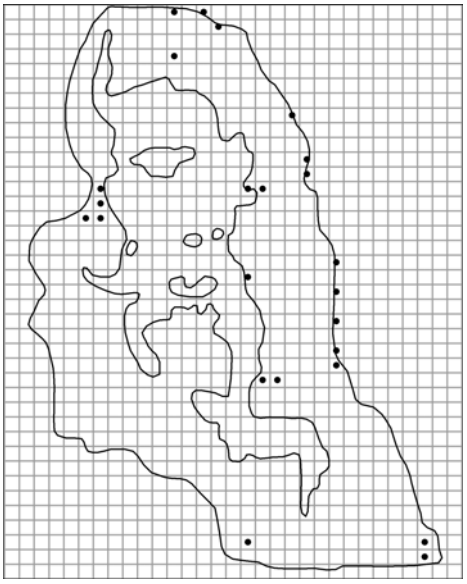
Eleocharis palustris



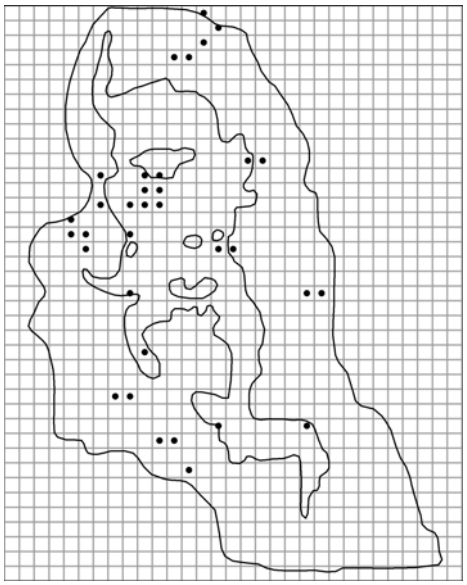
Eleocharis quinqueflora



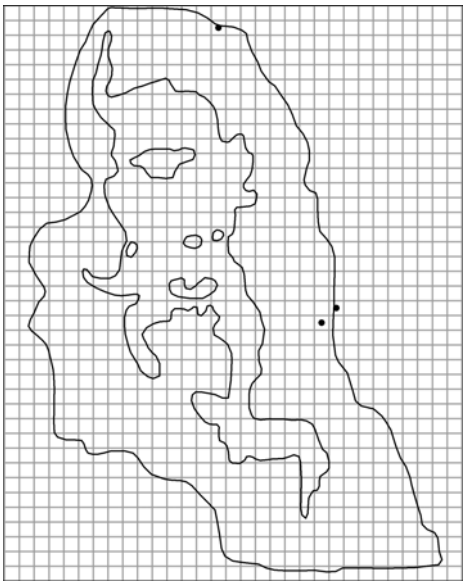
Eleocharis uniglumis subsp. fennica



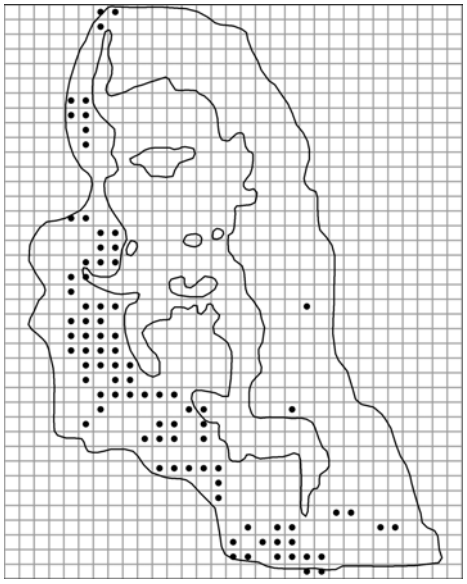
Eleocharis uniglumis subsp. uniglumis



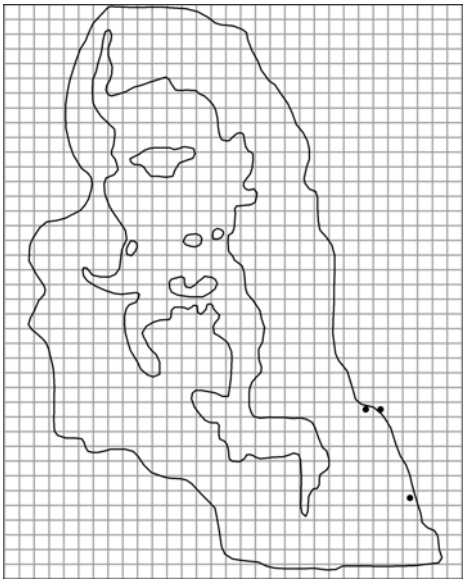
Elodea canadensis



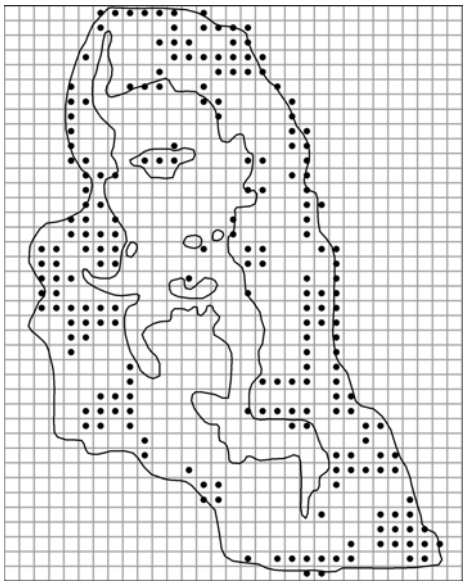
Elsholtzia ciliata



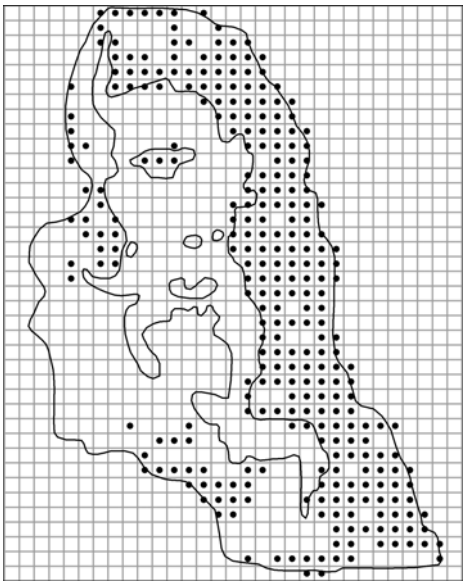
Elymus caninus



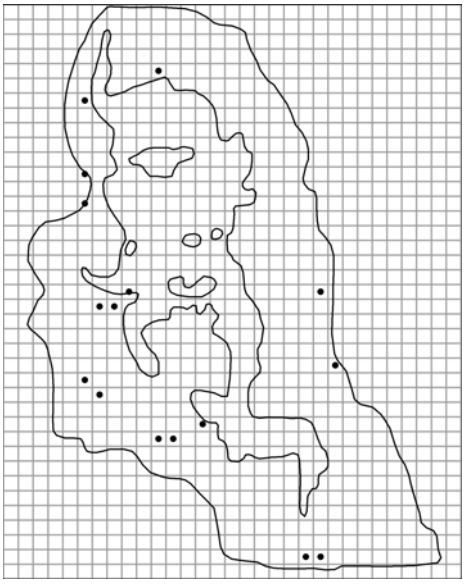
Elytrigia × littorea



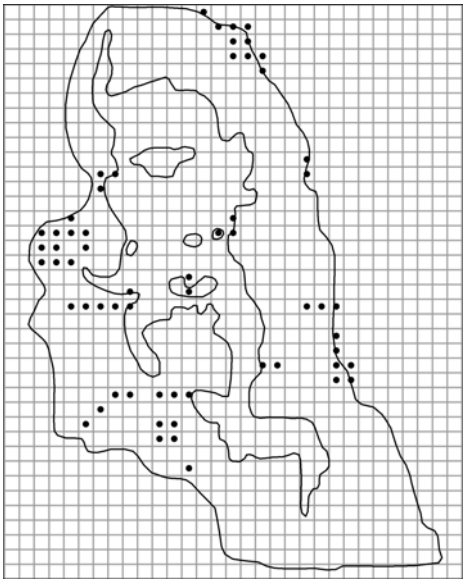
Elytrigia repens



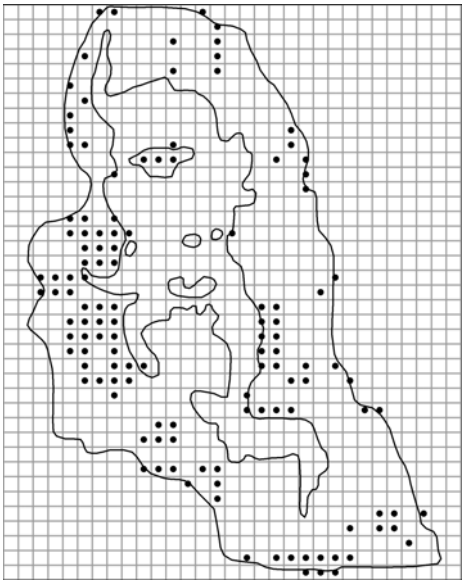
Empetrum nigrum



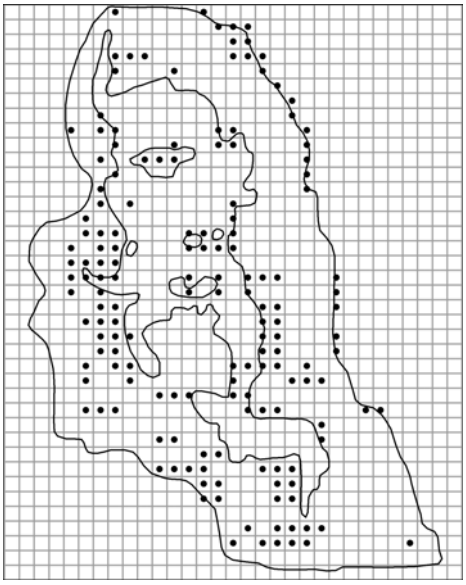
Epilobium adenocaulon



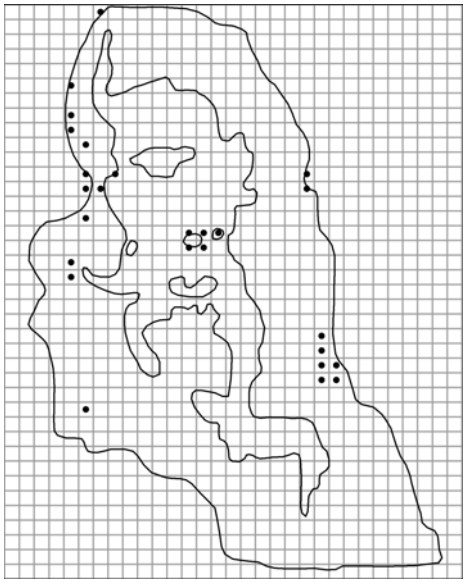
Epilobium hirsutum



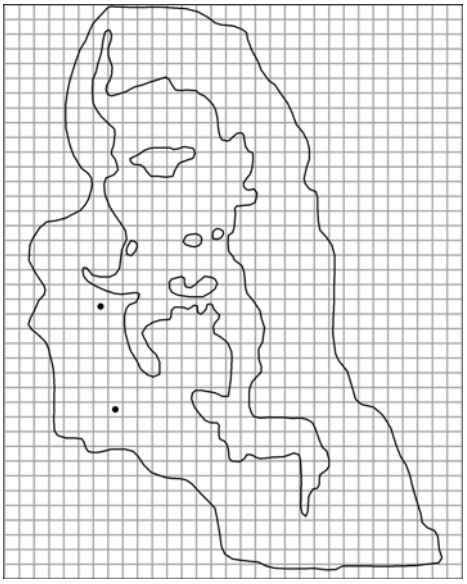
Epilobium montanum



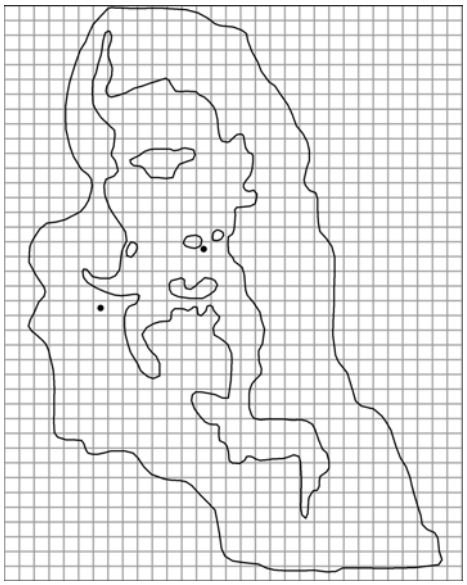
Epilobium palustre



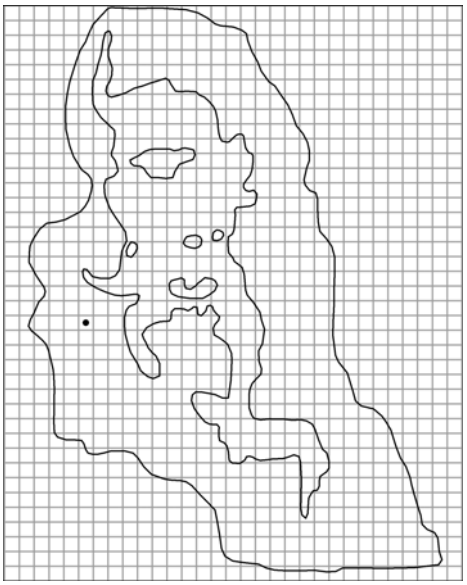
Epilobium parviflorum



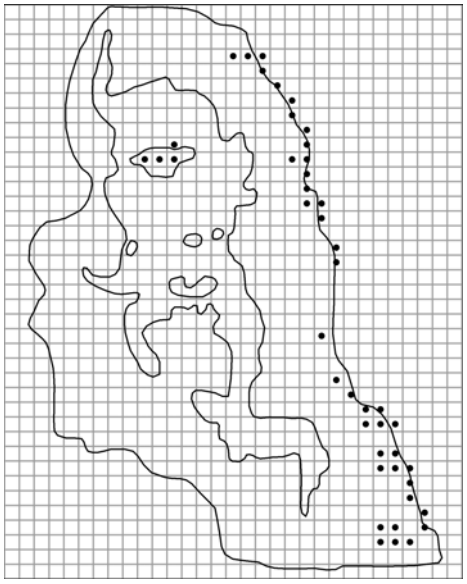
Epilobium roseum



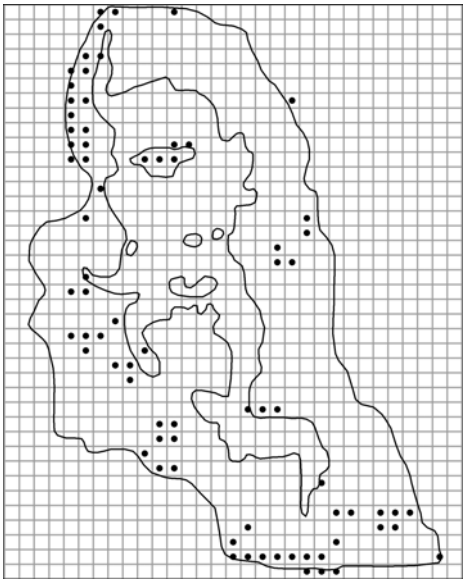
Epilobium rubescens



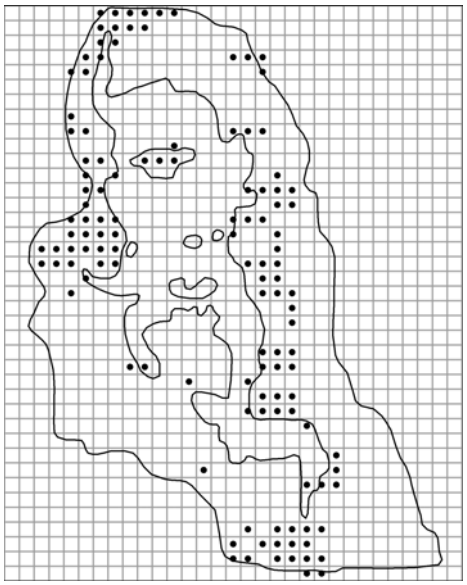
Epilobium tetragonum



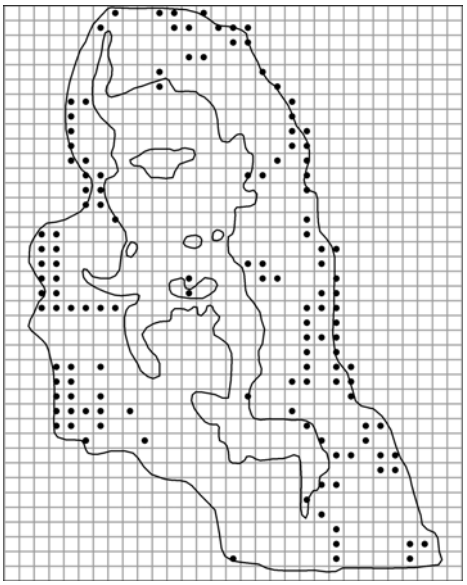
Epipactis atrorubens



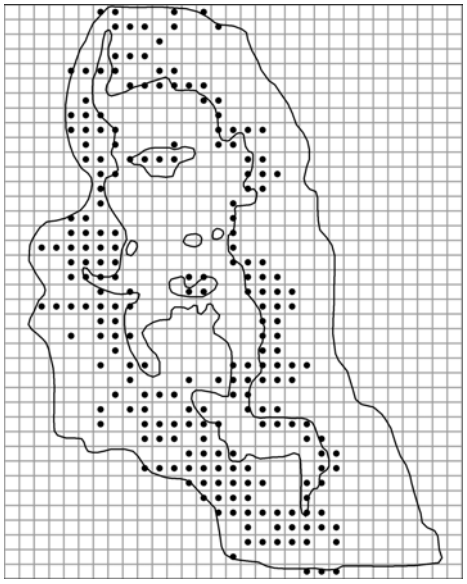
Epipactis helleborine



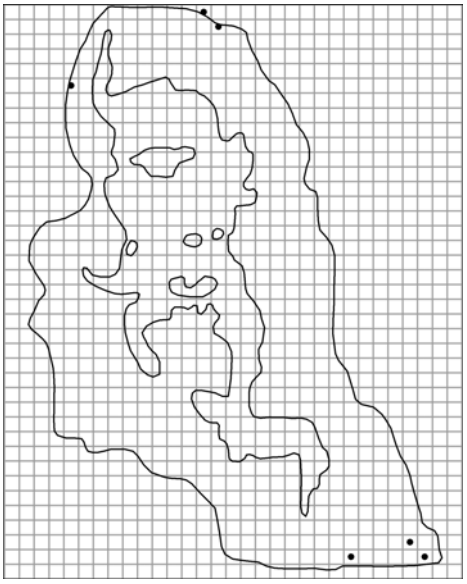
Epipactis palustris



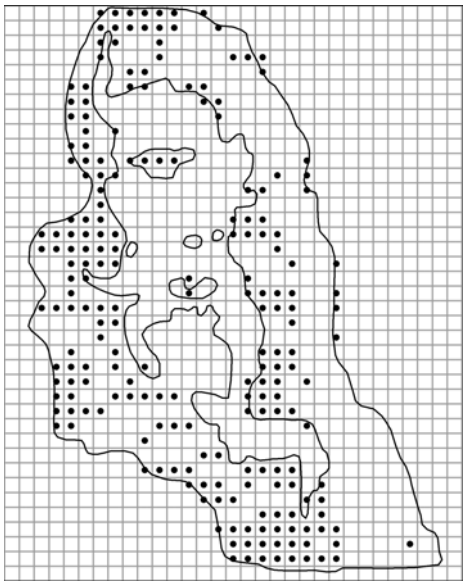
Equisetum arvense



Equisetum fluviatile



Equisetum hyemale



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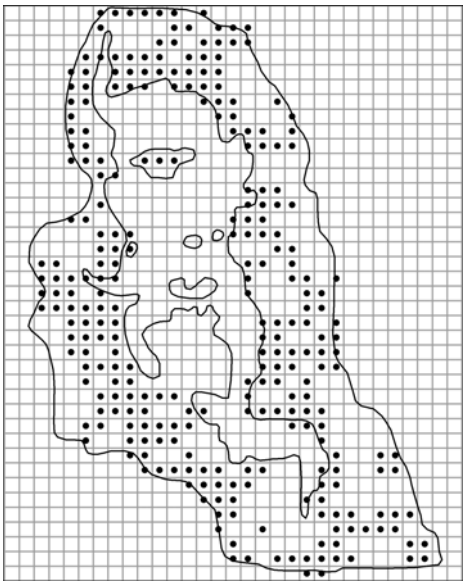

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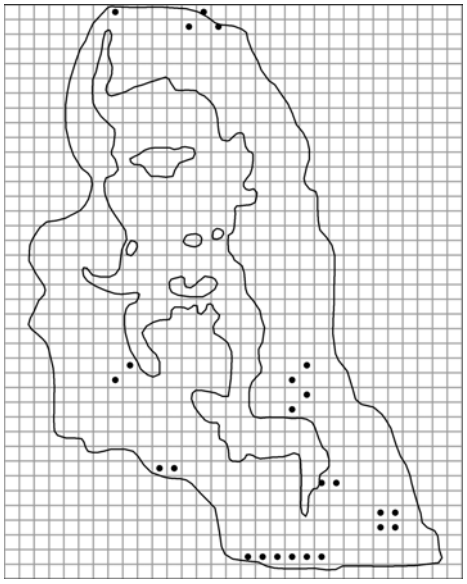

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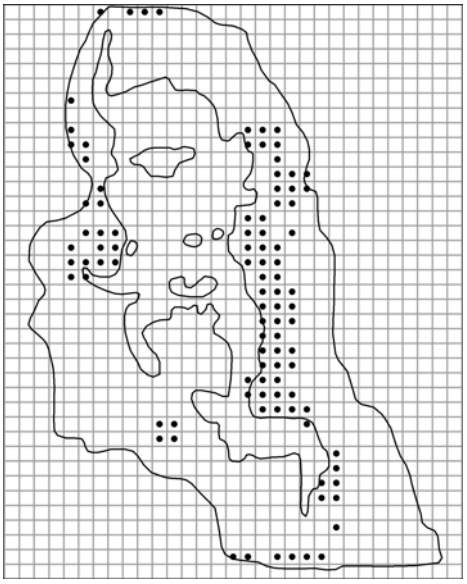
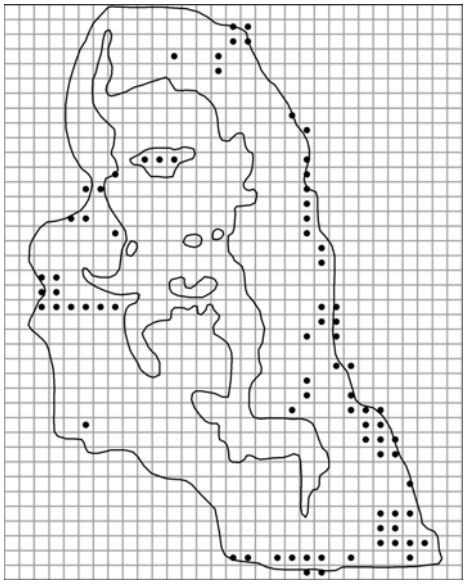
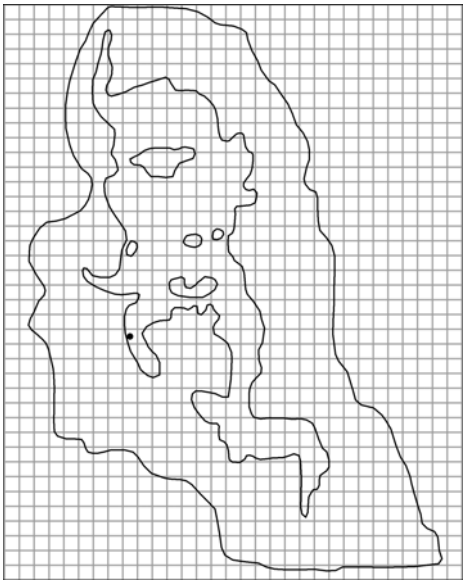


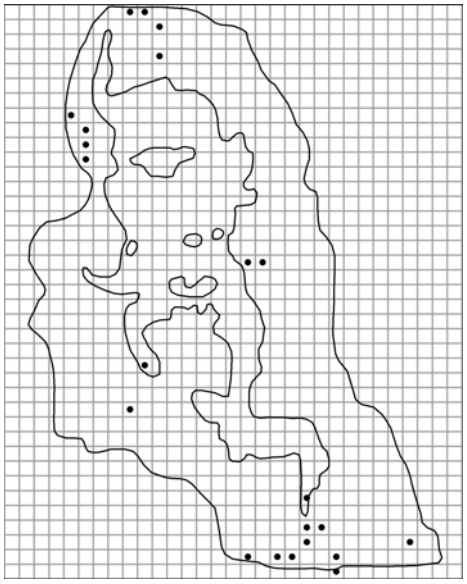
Equisetum variegatum



Erigeron acris



Eriophorum gracile



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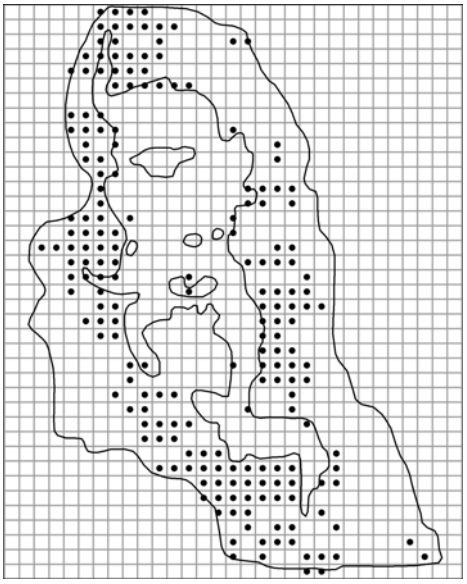

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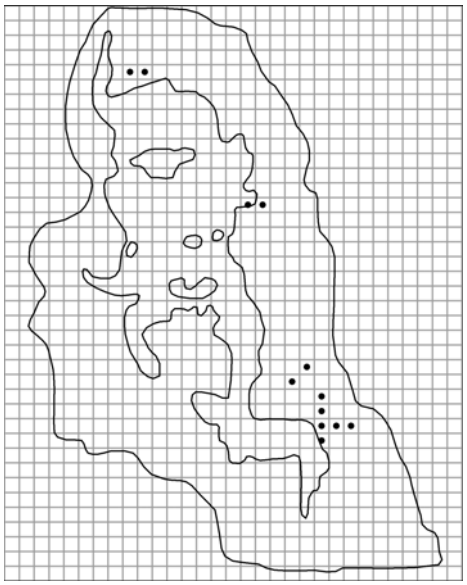

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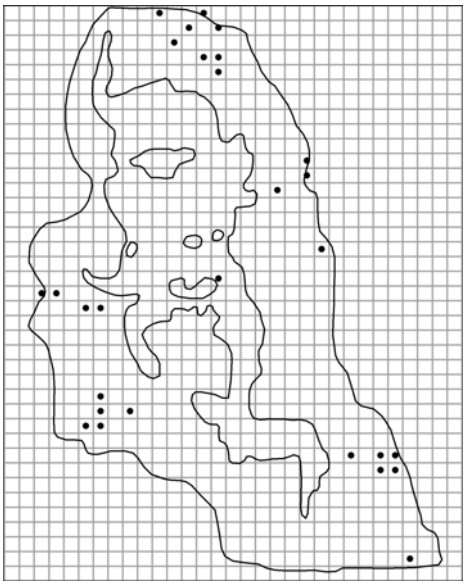
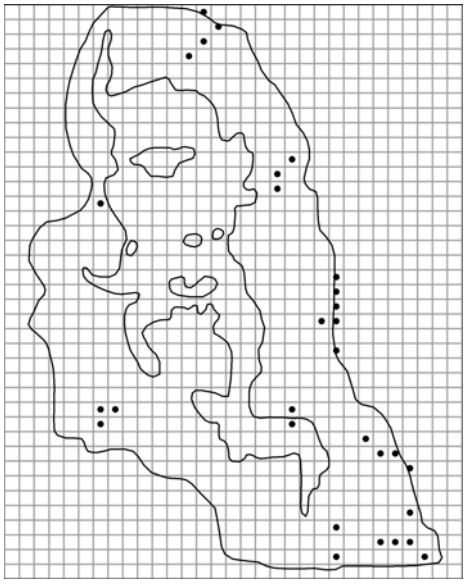
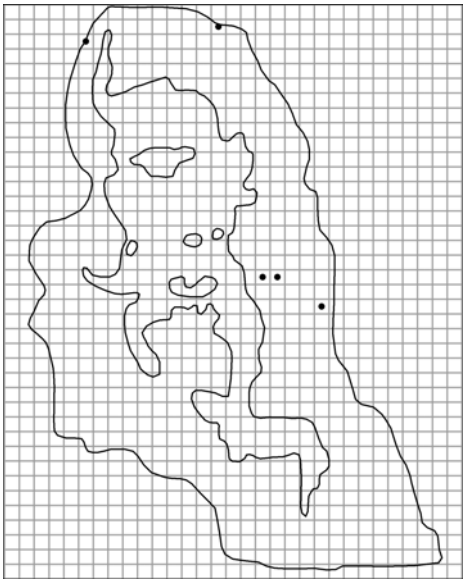


Erodium cicutarium



Erophila verna



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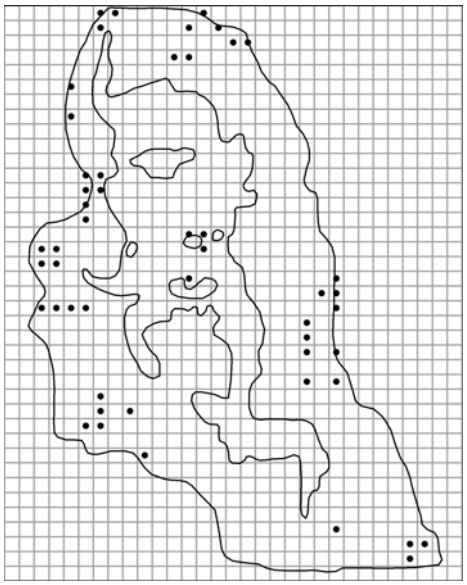
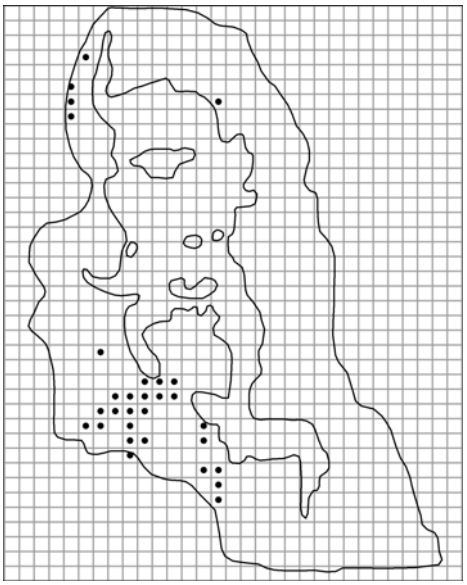
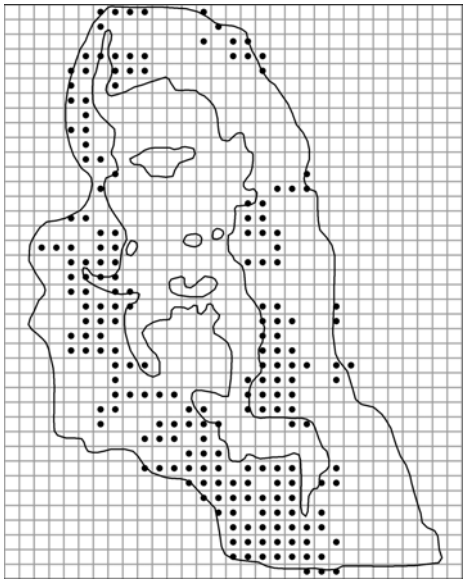


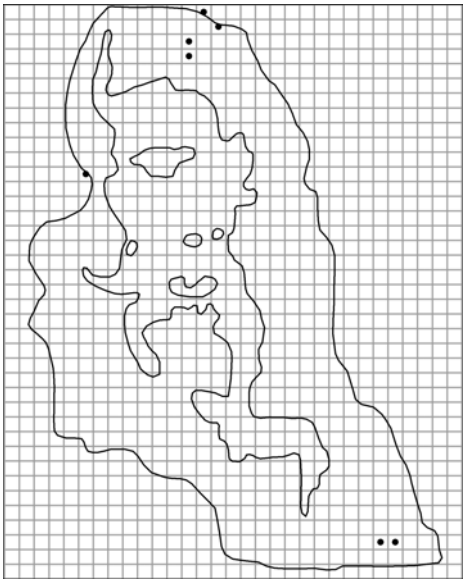
Erysimum cheiranthoides



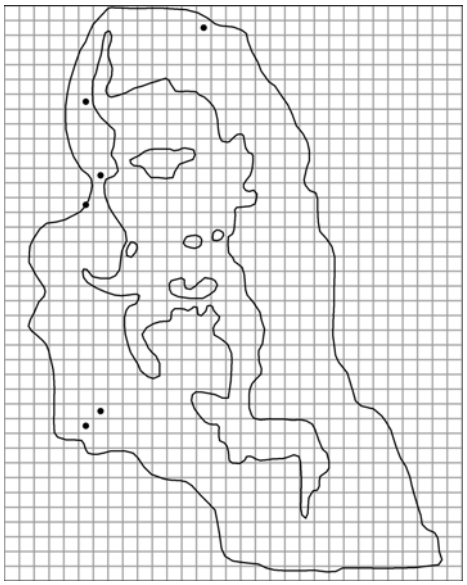
Euonymus europaea



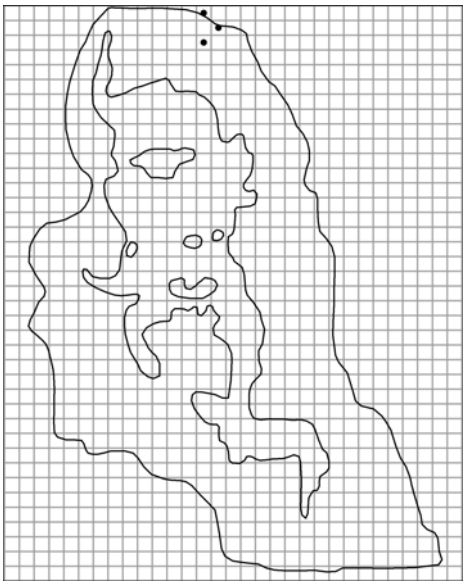
Eupatorium cannabinum



Euphorbia cyparissias



Euphorbia helioscopia



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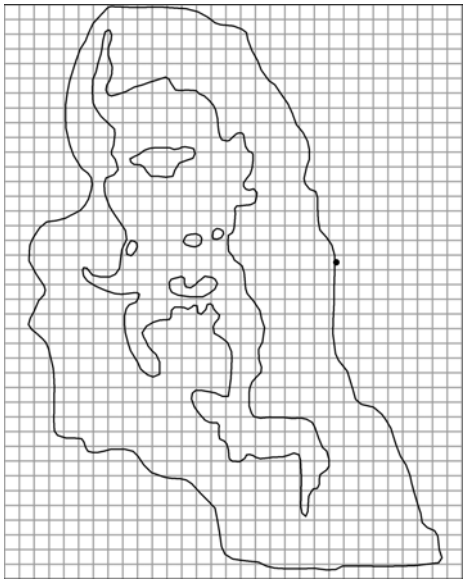
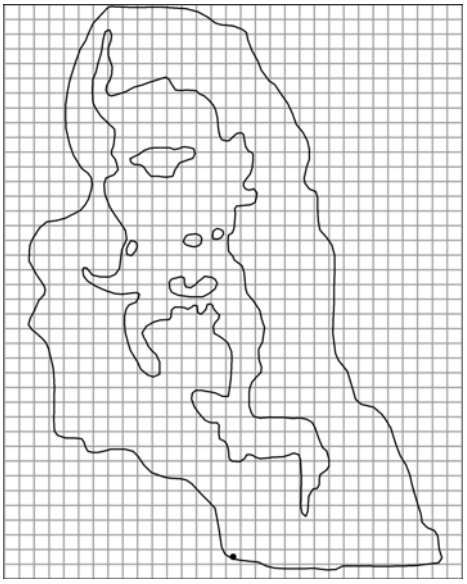
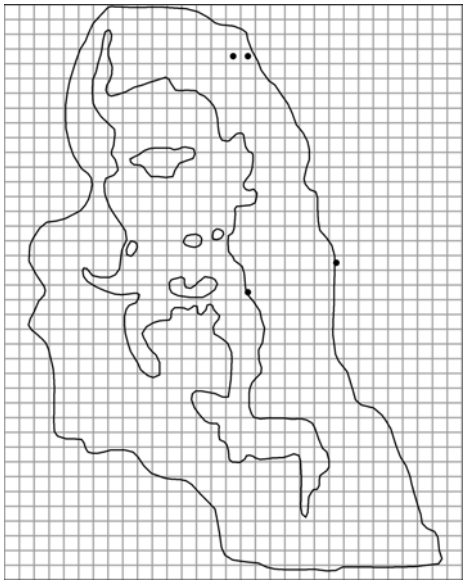


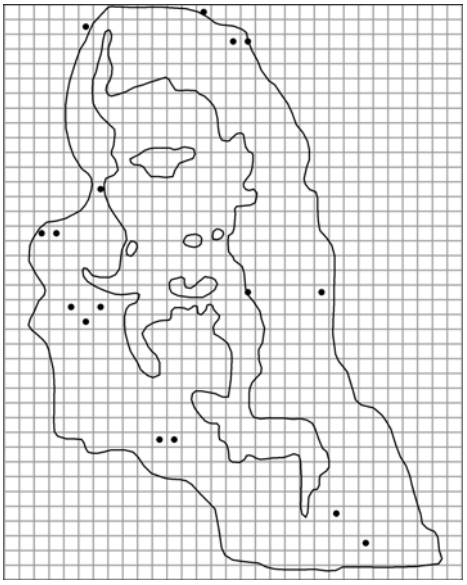
Euphrasia brevipila



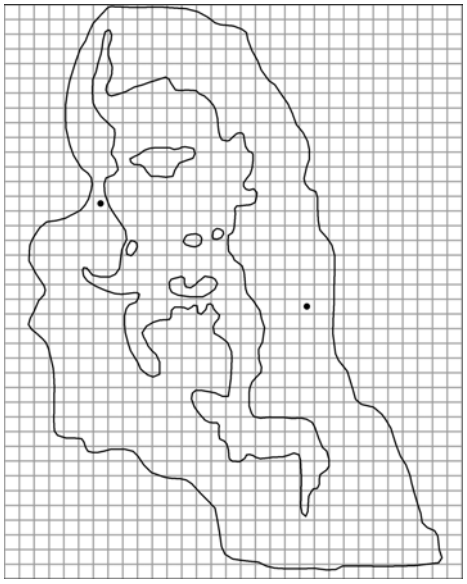
Euphrasia micrantha



Euphrasia × murbeckii



Euphrasia parviflora



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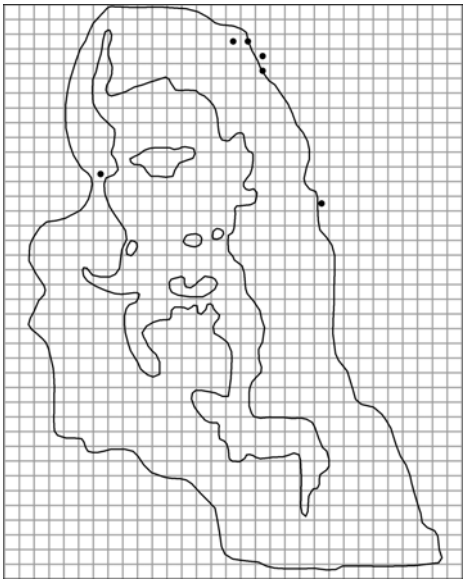
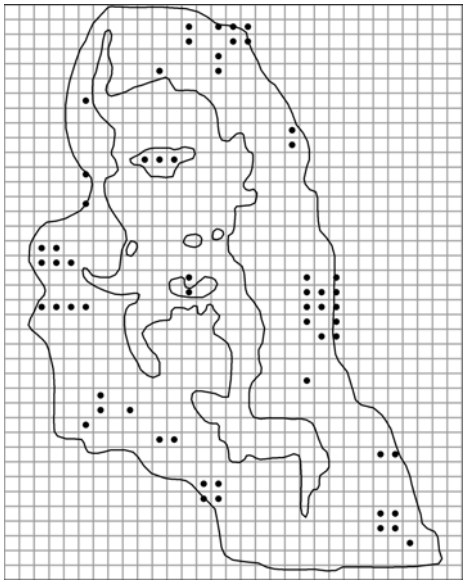
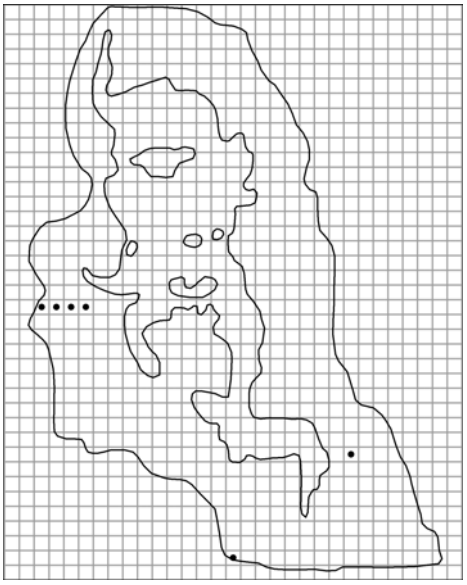


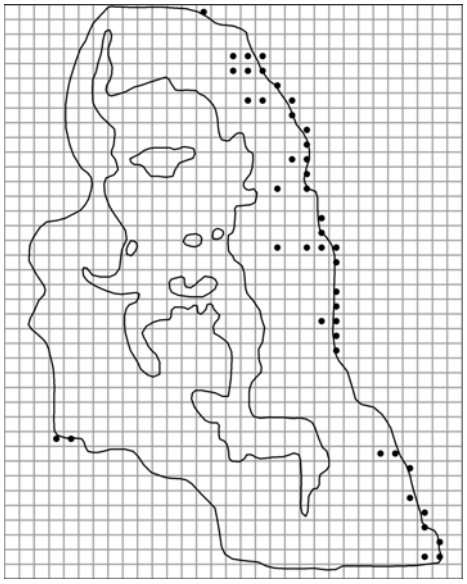
Euphrasia stricta



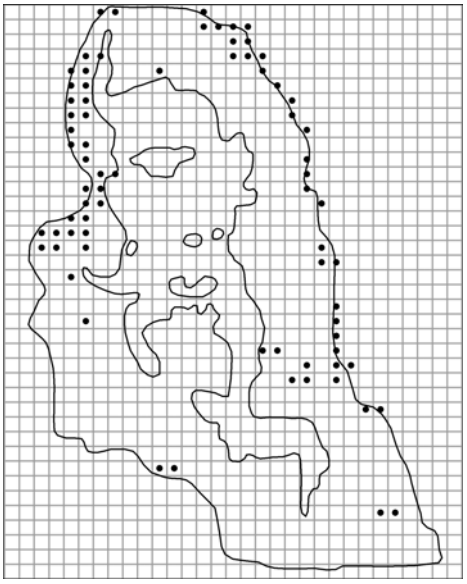
Fallopia convolvulus



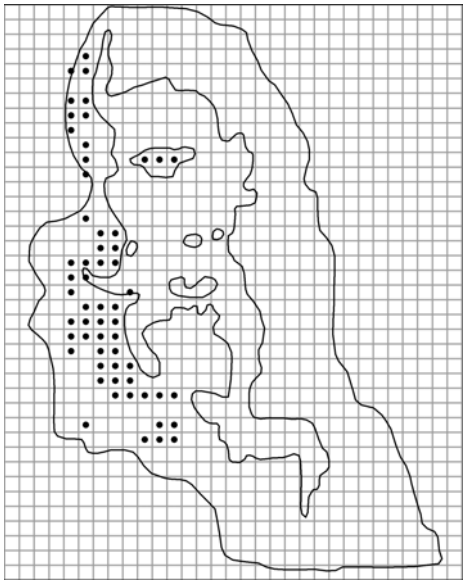
Fallopia dumetorum



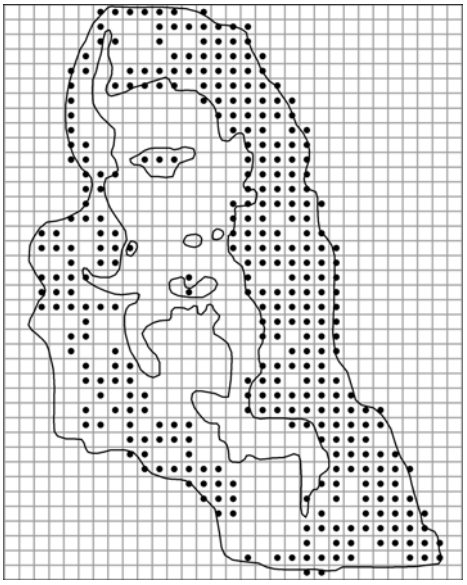
Festuca arenaria



Festuca arundinacea



Festuca gigantea



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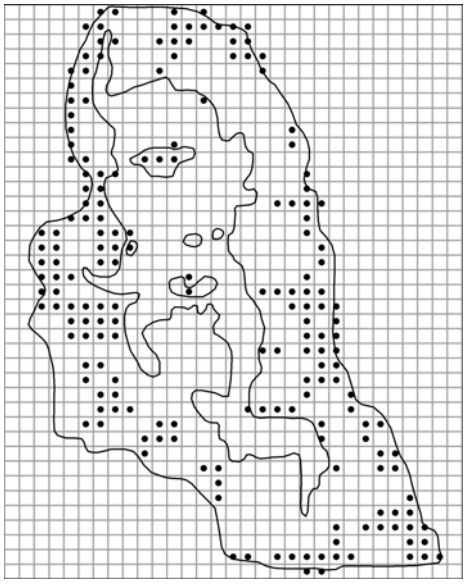
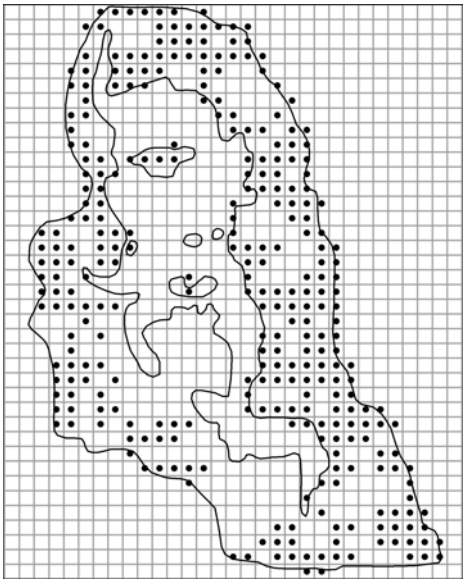
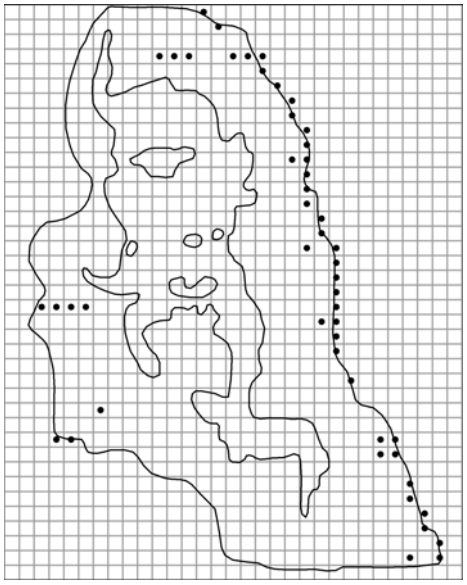


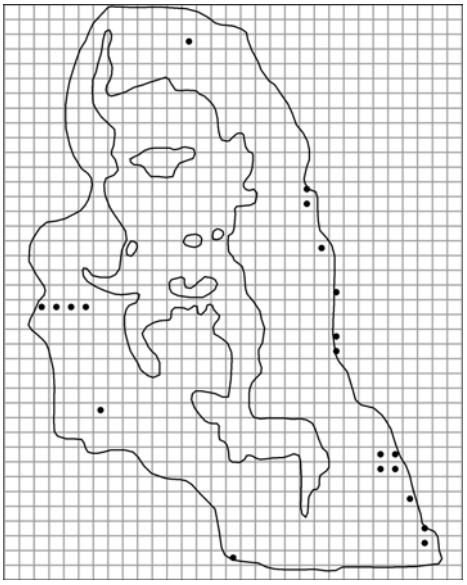
Festuca pratensis



Festuca rubra



Festuca sabulosa



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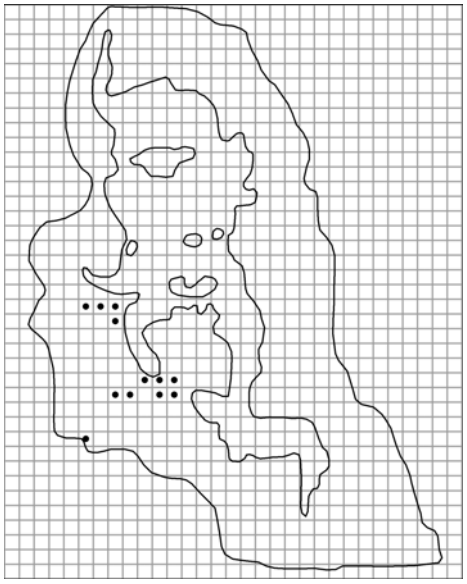
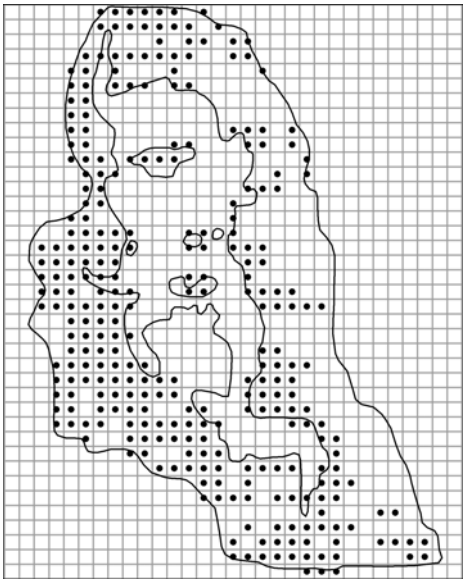
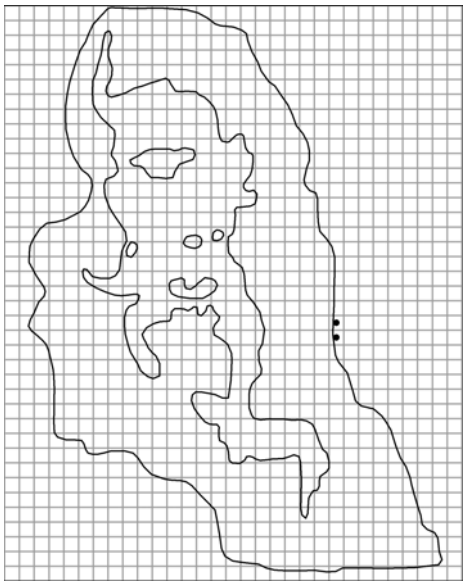


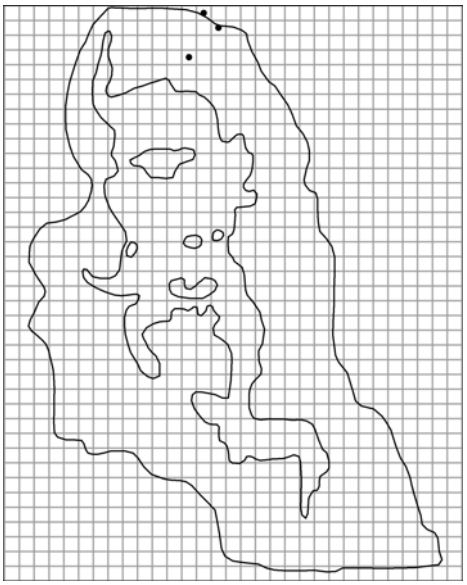
Ficaria verna



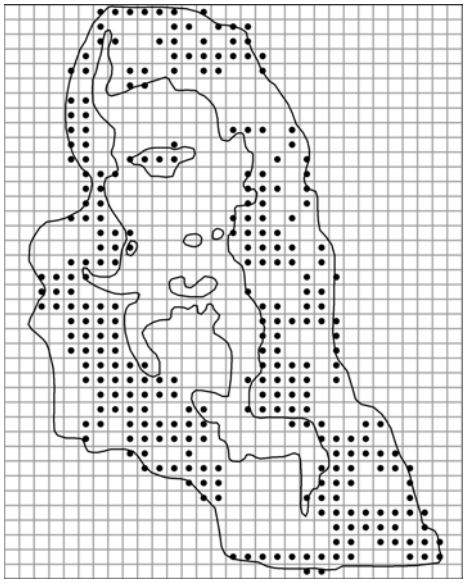
Filipendula ulmaria



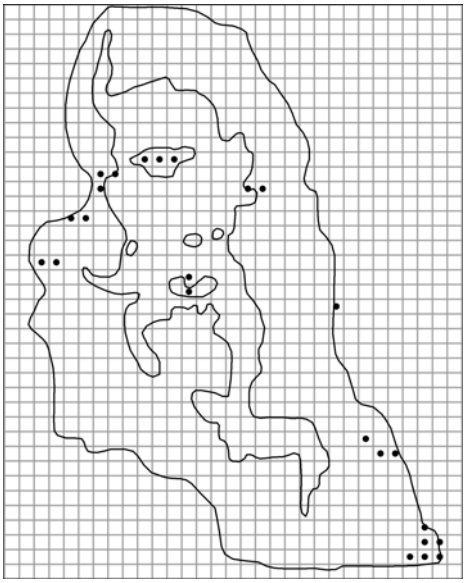
Filipendula vulgaris



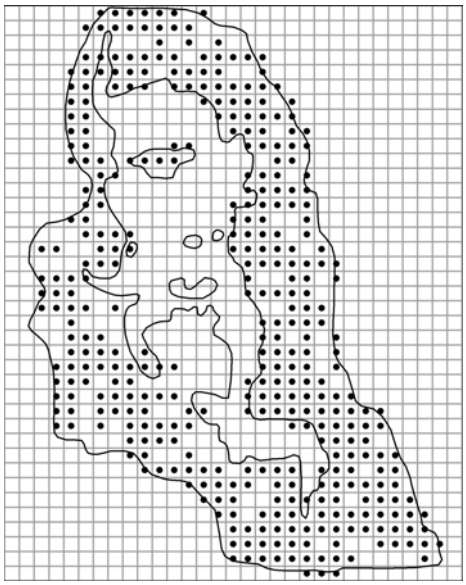
Fragaria moschata



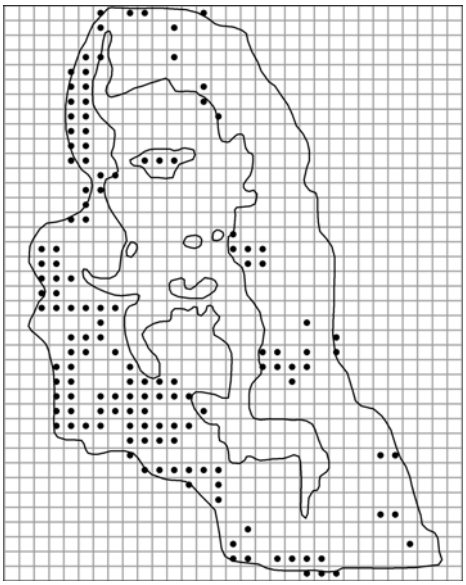
Fragaria vesca



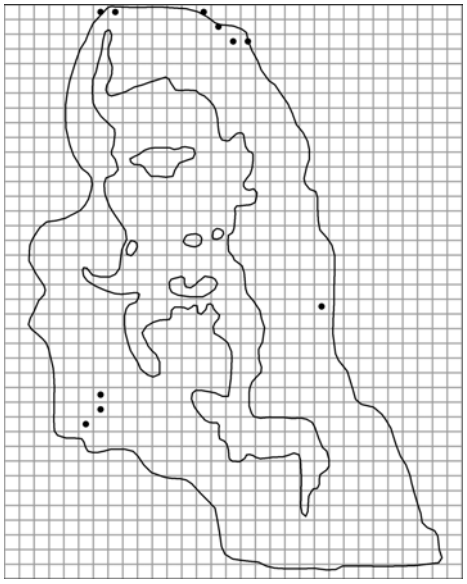
Fragaria viridis



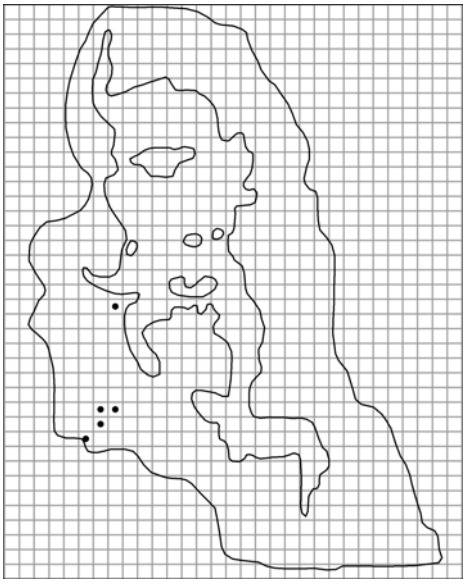
Frangula alnus



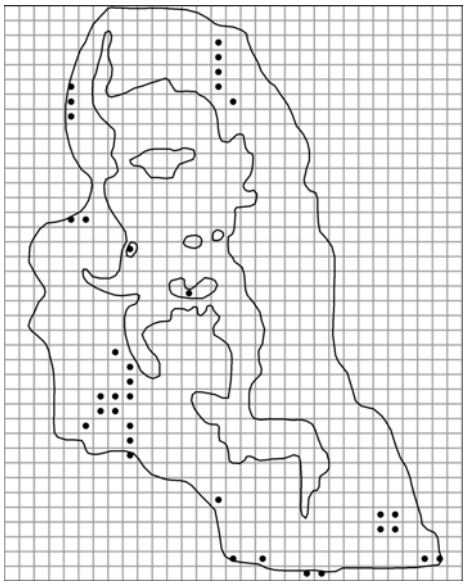
Fraxinus excelsior



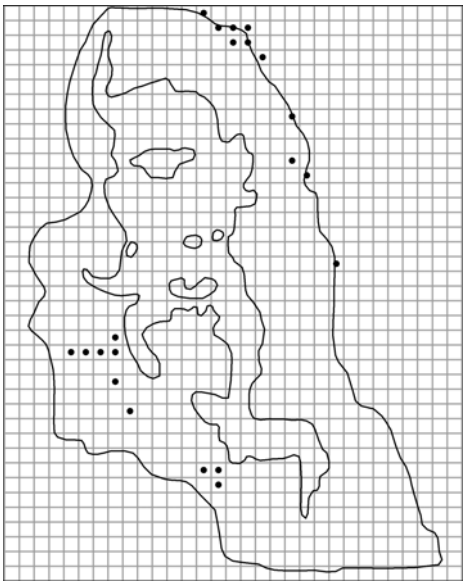
Fumaria officinalis



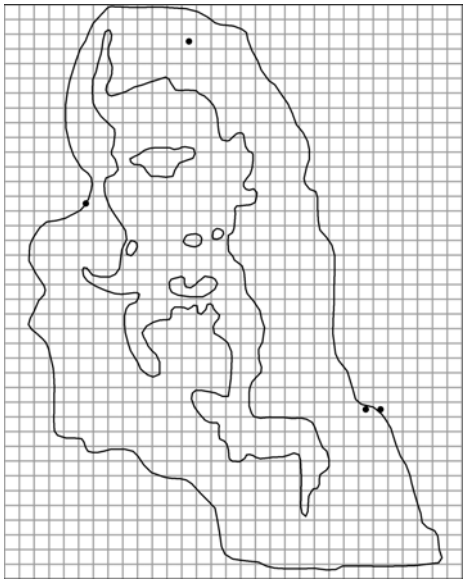
Gagea lutea



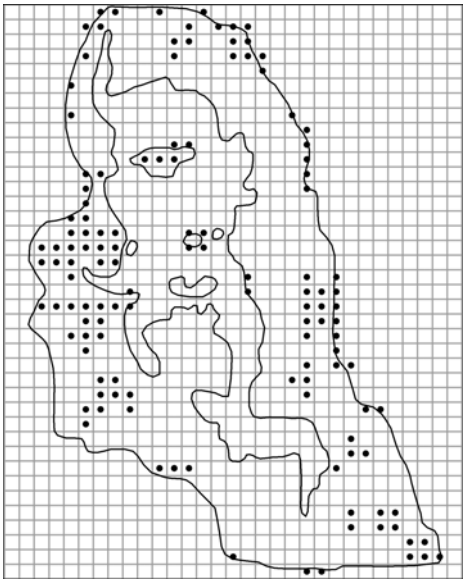
Galeobdolon luteum



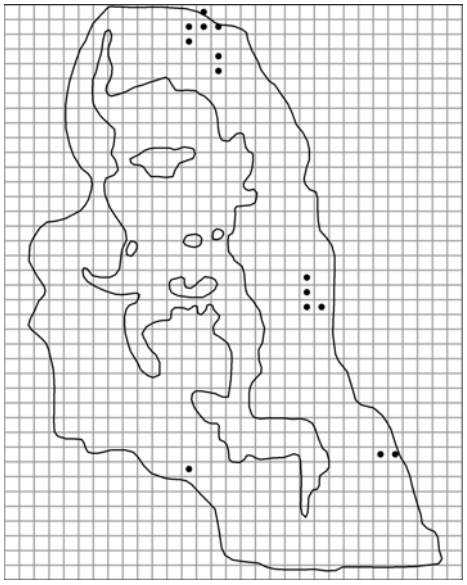
Galeopsis bifida



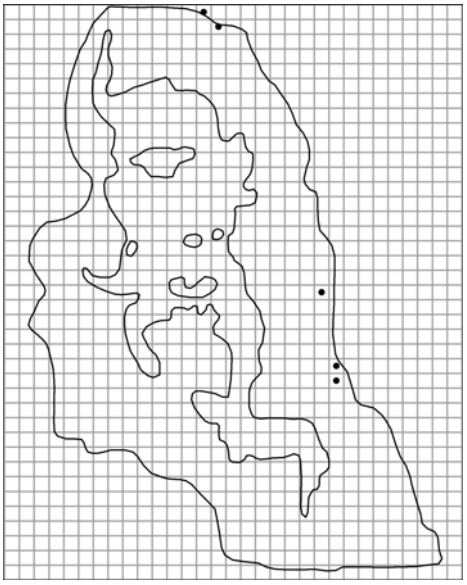
Galeopsis speciosa



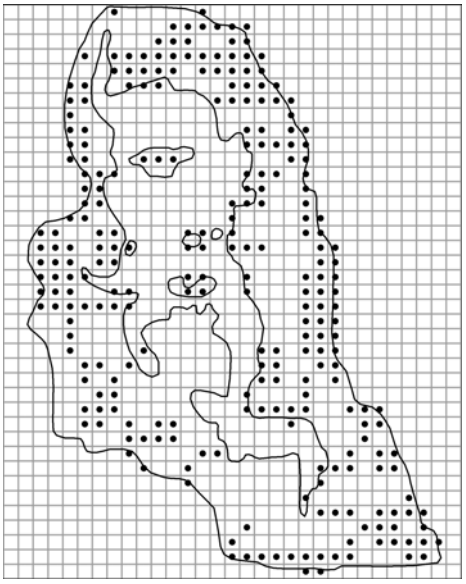
Galeopsis tetrahit



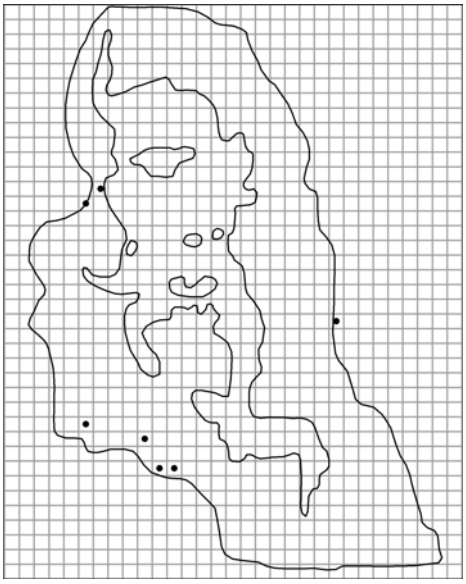
Galinsoga parviflora



Galinsoga quadriradiata



Galium album



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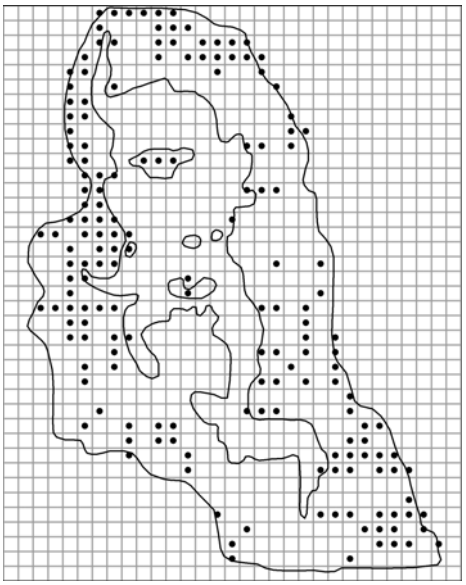

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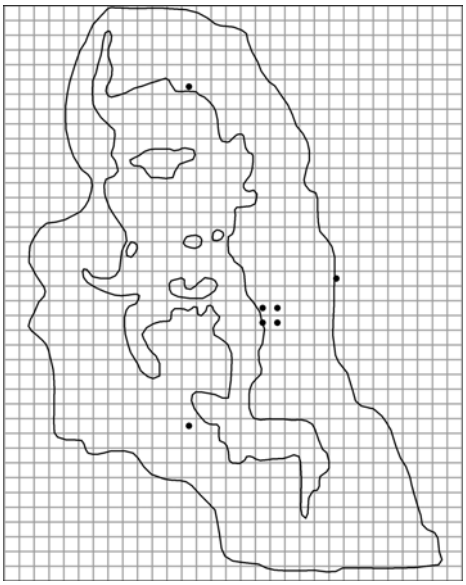

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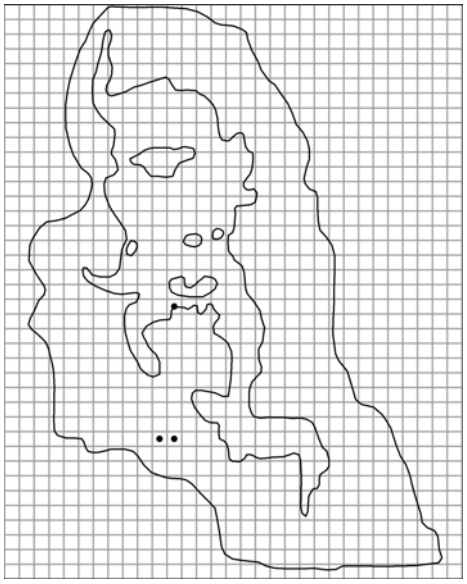
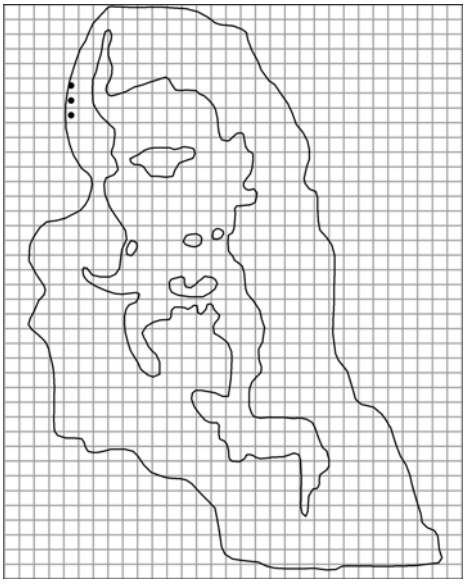
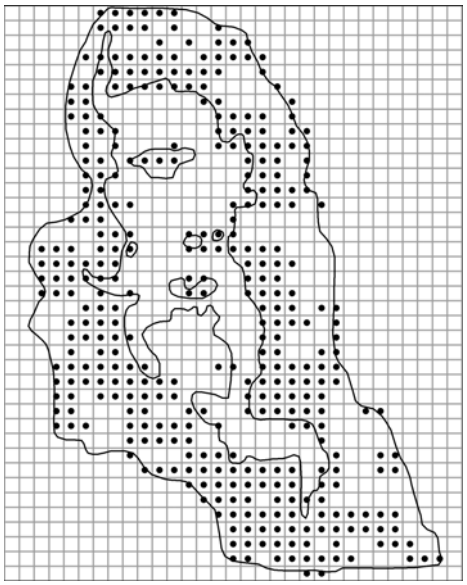


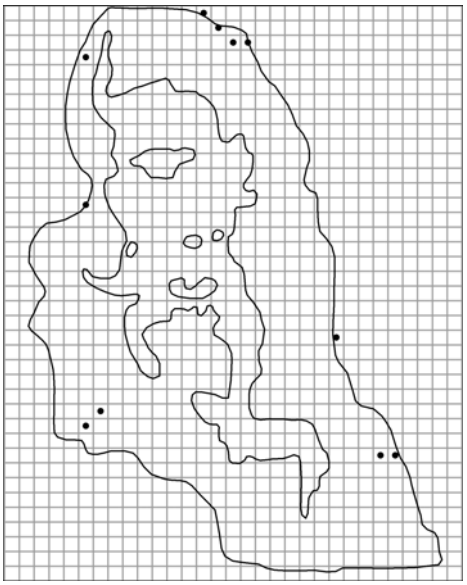
Galium mollugo



Galium odoratum



Galium palustre



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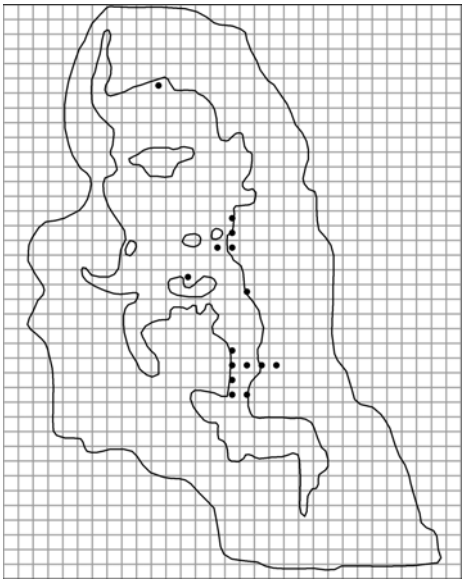

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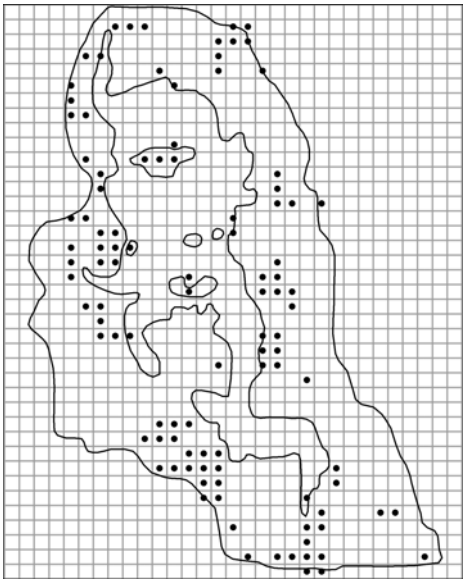
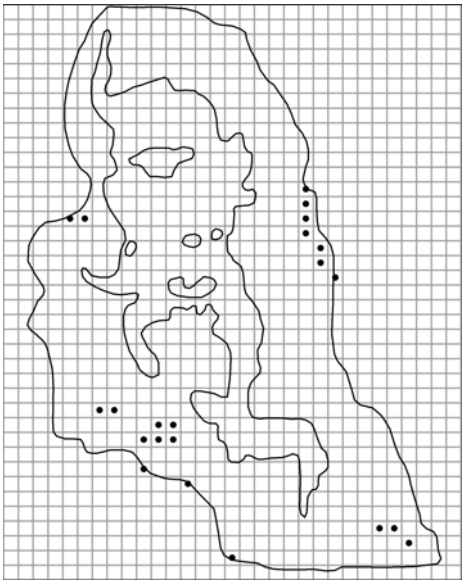
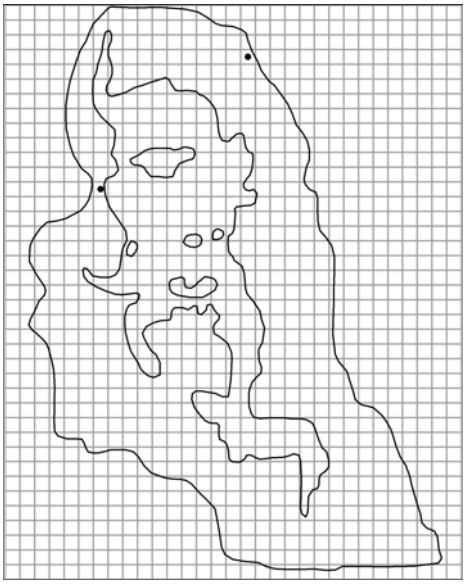


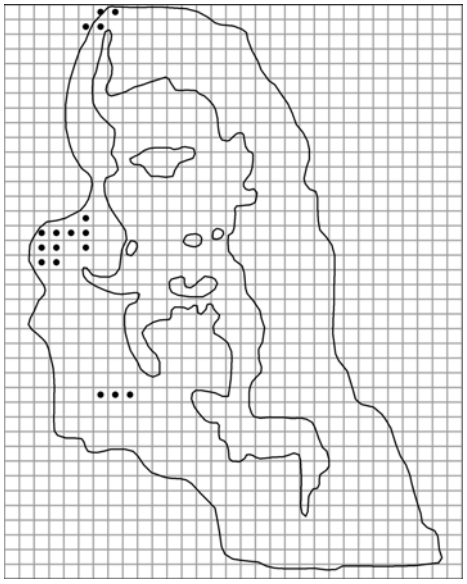
Galium uliginosum



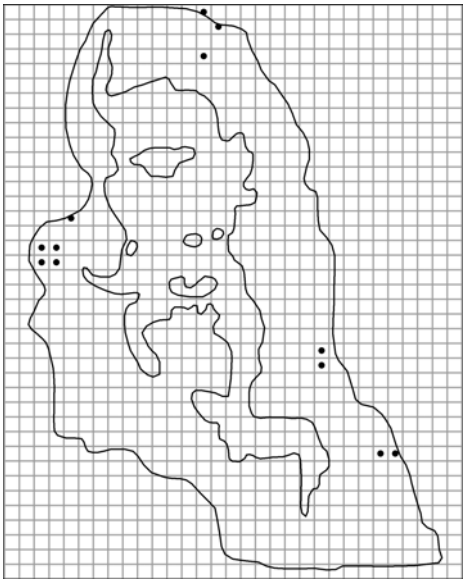
Galium verum



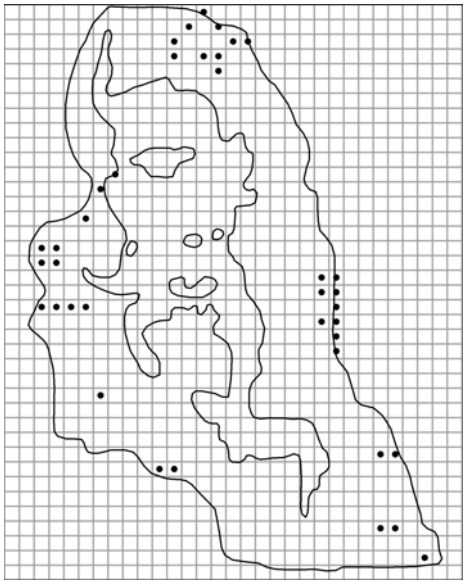
Gentianella amarella subsp. uliginosa



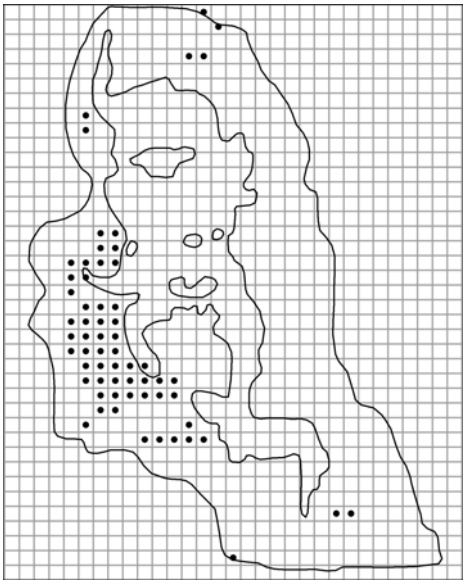
Geranium palustre



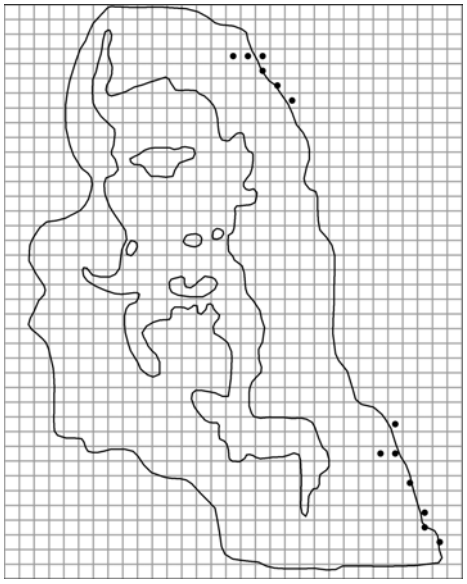
Geranium pratense



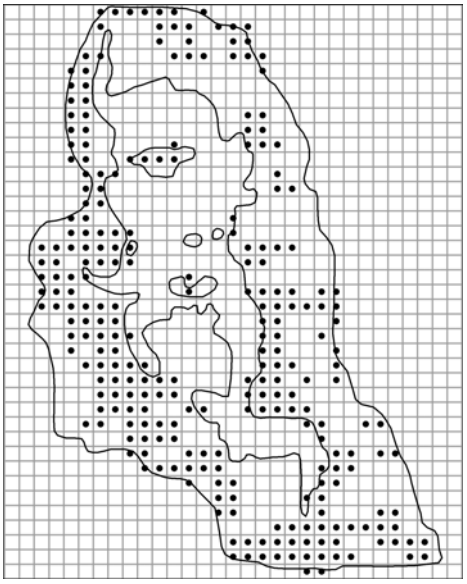
Geranium pusillum



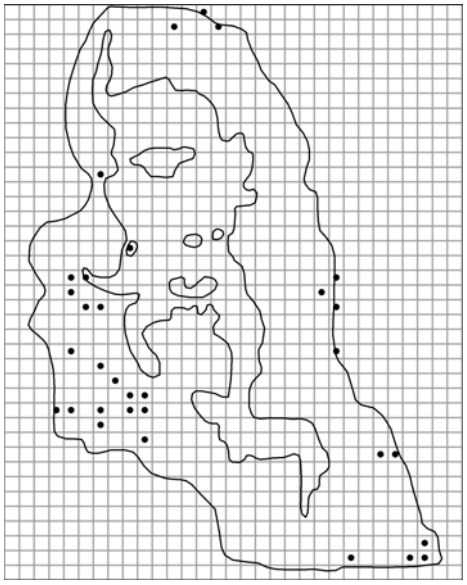
Geranium robertianum



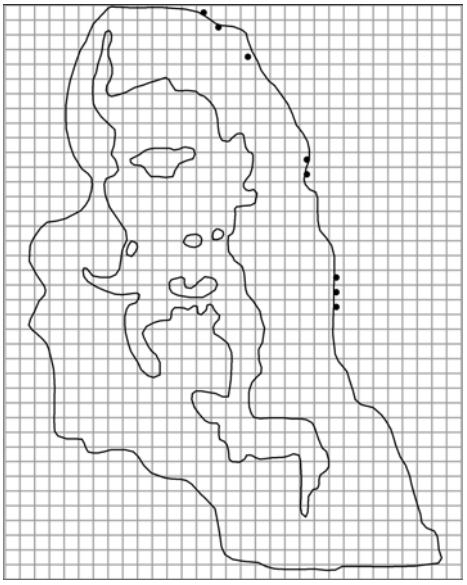
Geranium sanguineum



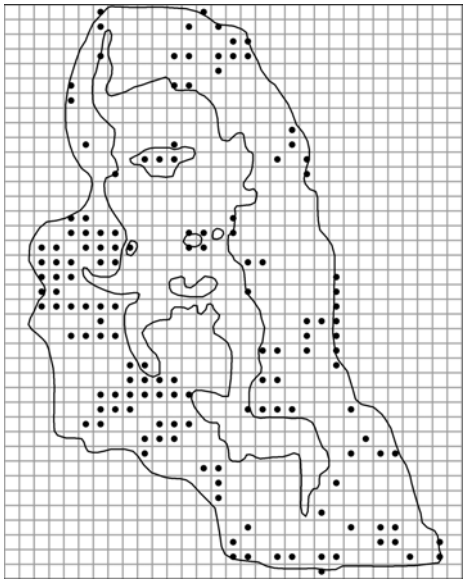
Geum rivale



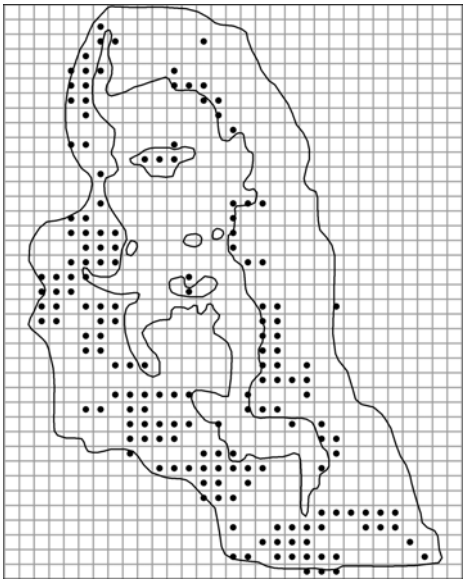
Geum urbanum



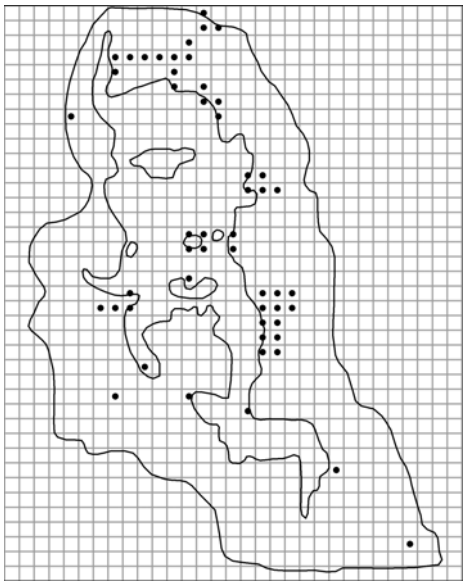
Glaux maritima



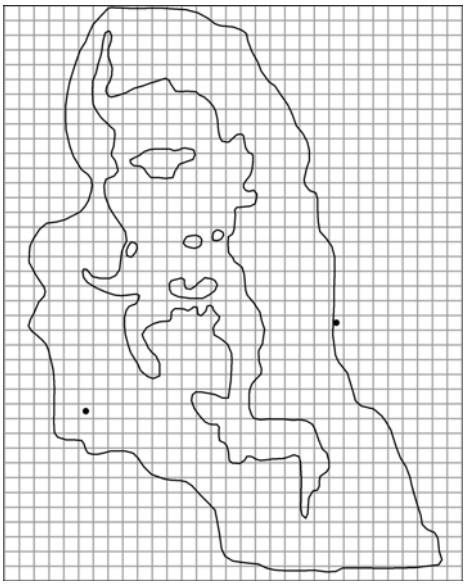
Glechoma hederacea



Glyceria fluitans



Glyceria maxima



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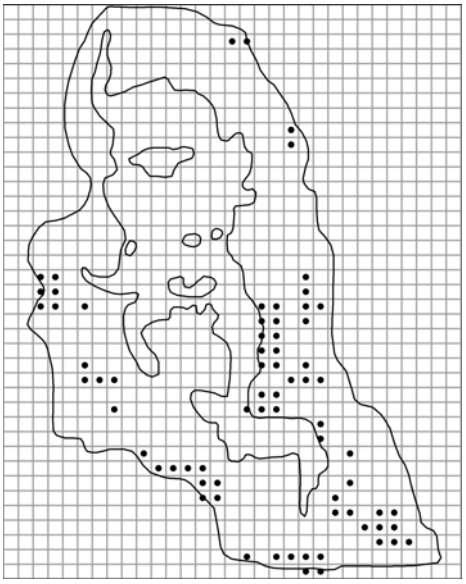
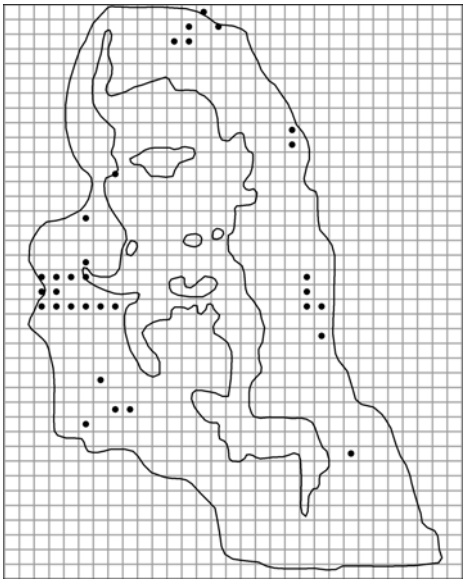
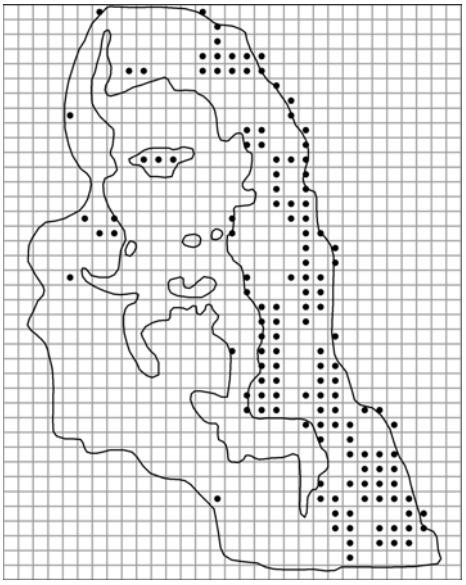


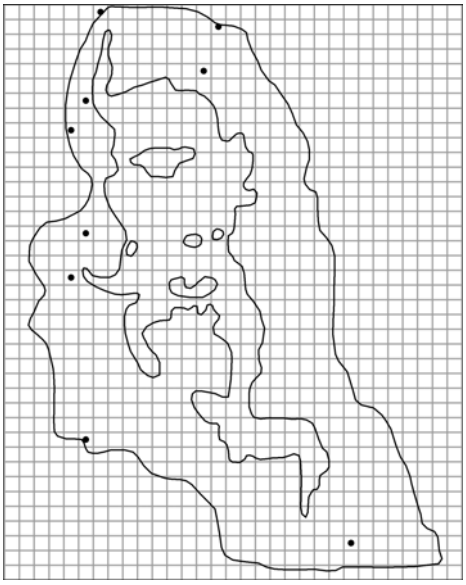
Gnaphalium sylvaticum



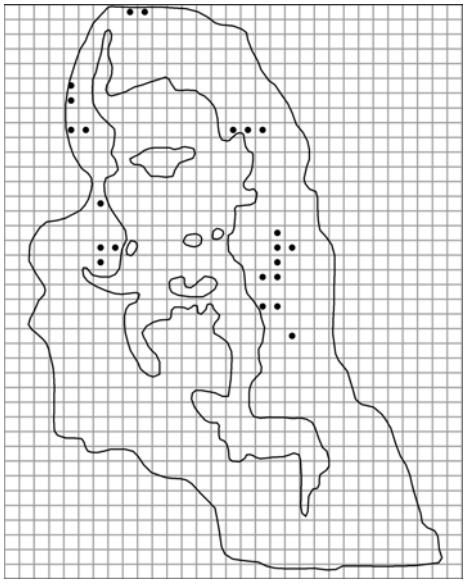
Gnaphalium uliginosum



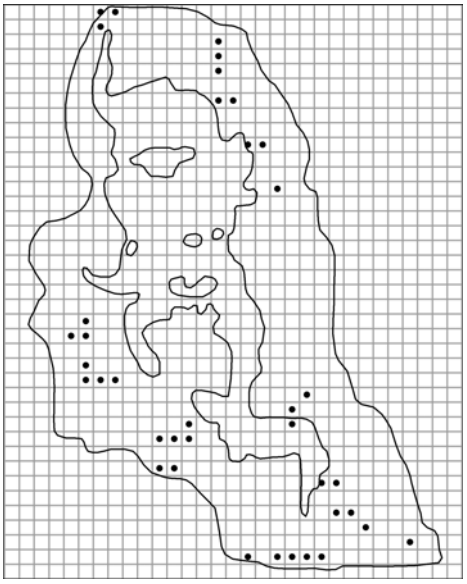
Goodyera repens



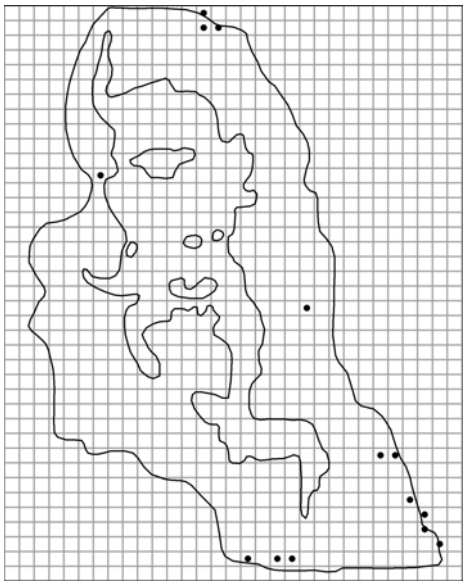
Grossularia reclinata var. uva-crispa



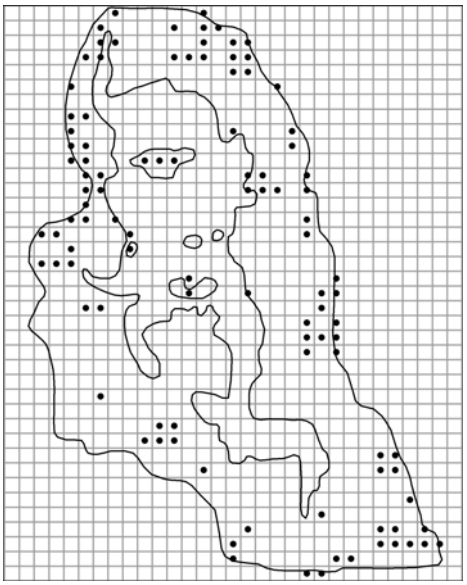
Gymnadenia conopsea



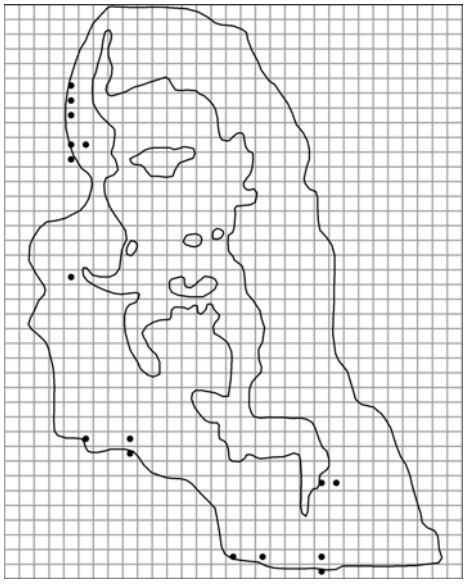
Gymnocarpium dryopteris



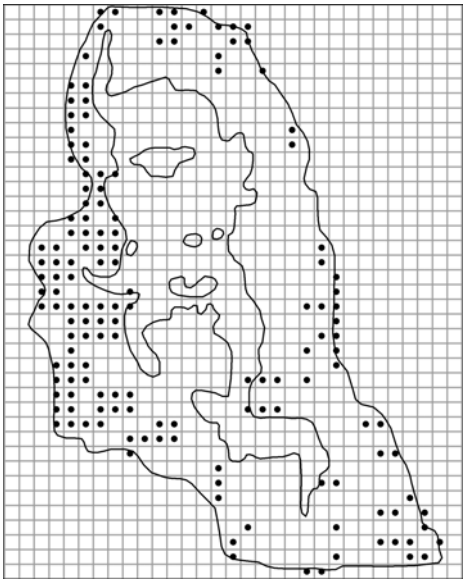
Helictotrichon pratense



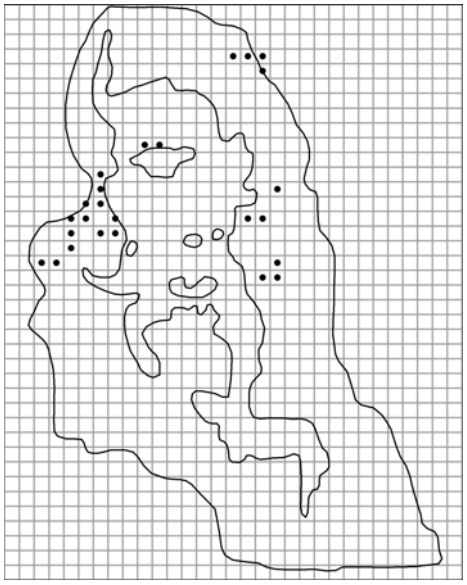
Helictotrichon pubescens



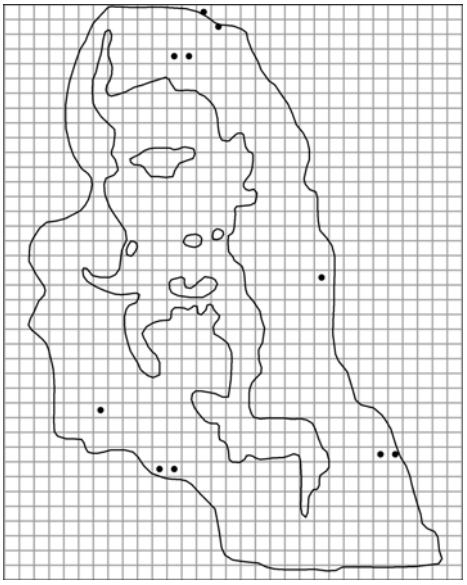
Hepatica nobilis



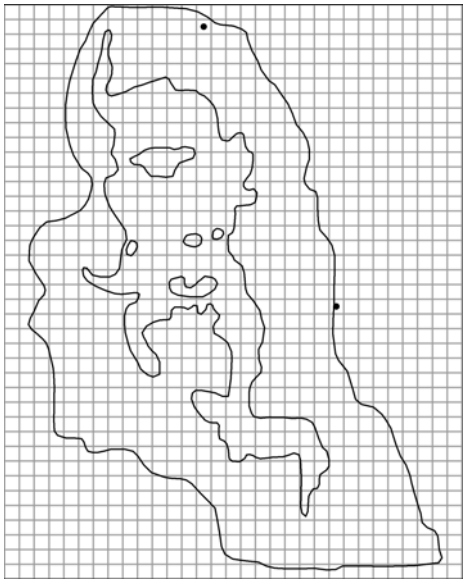
Heracleum sibiricum



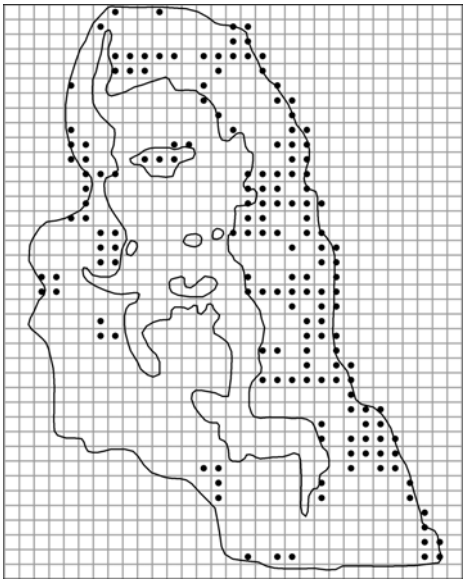
Herminium monorchis



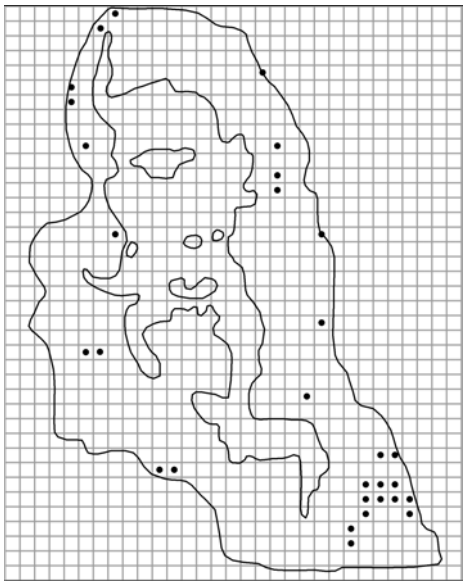
Herniaria glabra



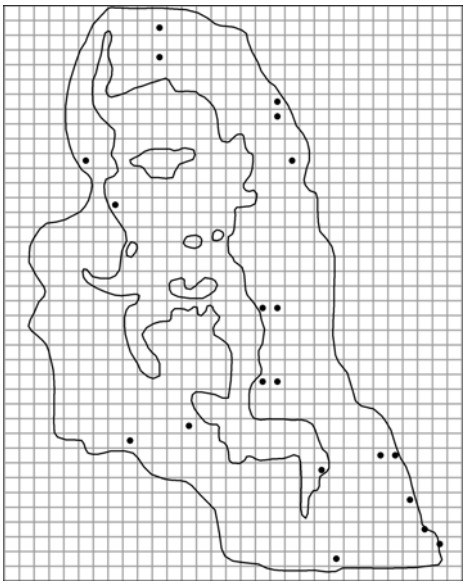
Hesperis matronalis



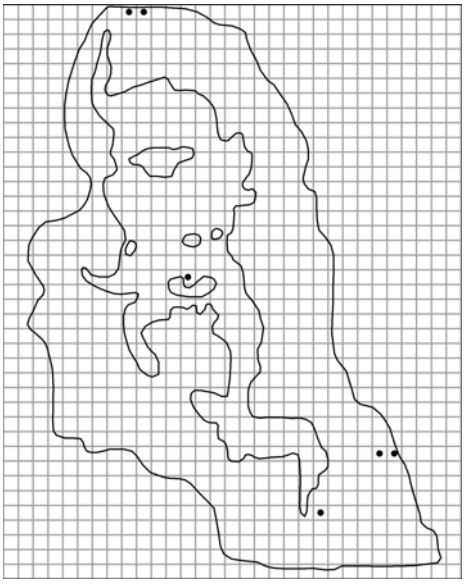
Hieracium umbellatum



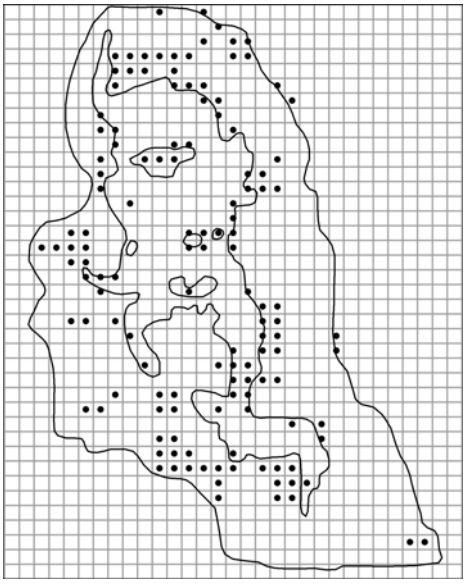
Hieracium vulgatum



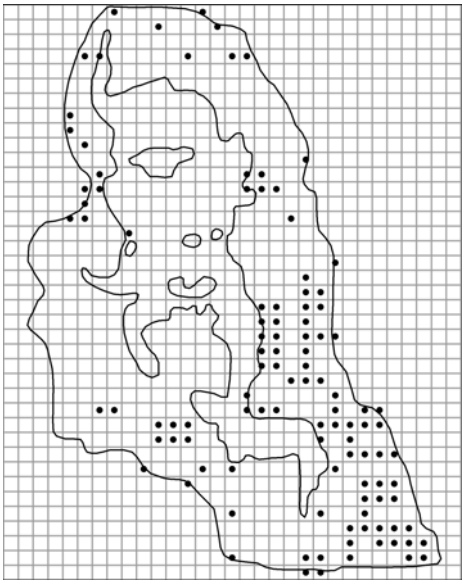
Hierochloë hirta



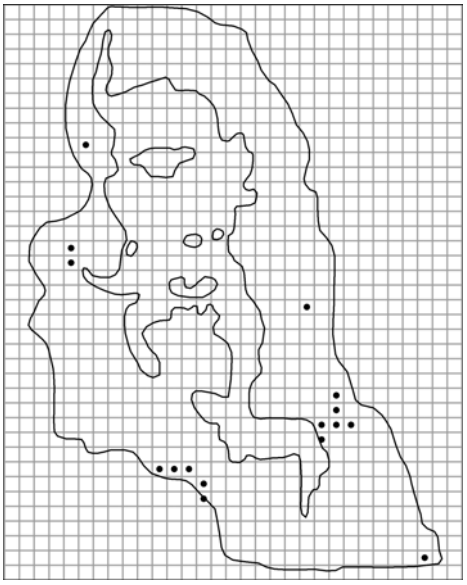
Hierochloë odorata



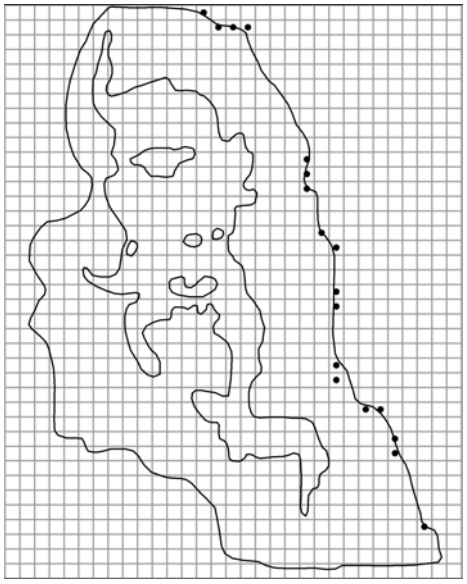
Hippuris vulgaris



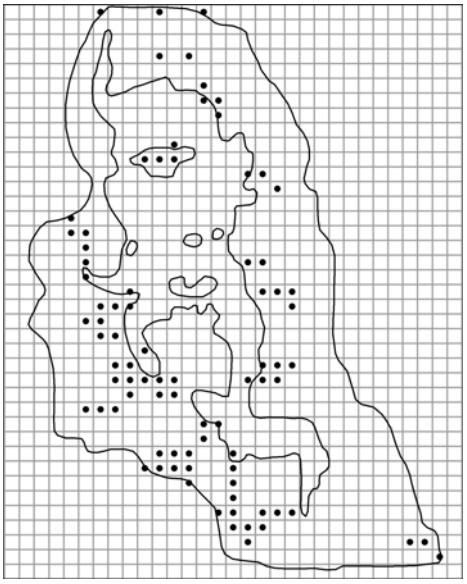
Holcus lanatus



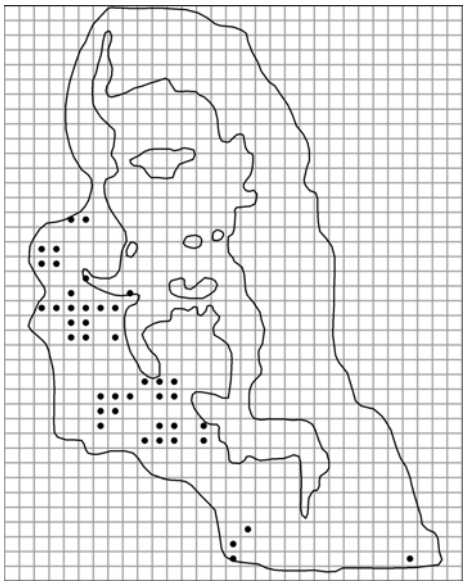
Holcus mollis



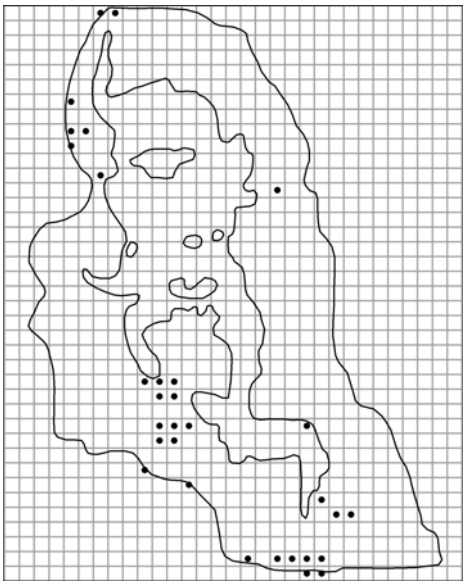
Honckenya peploides



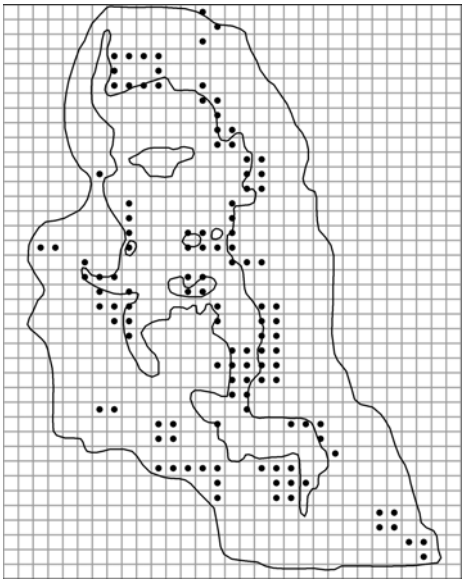
Hottonia palustris



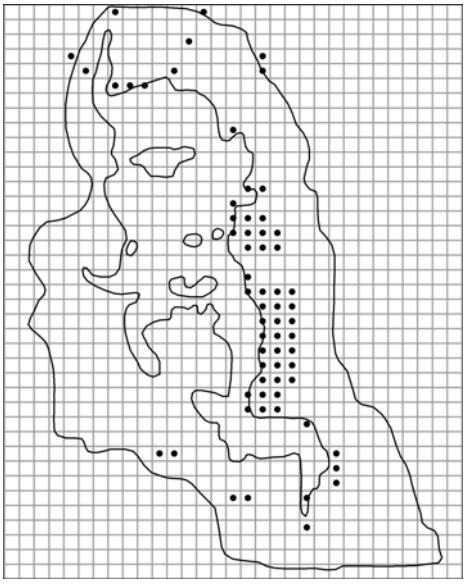
Humulus lupulus



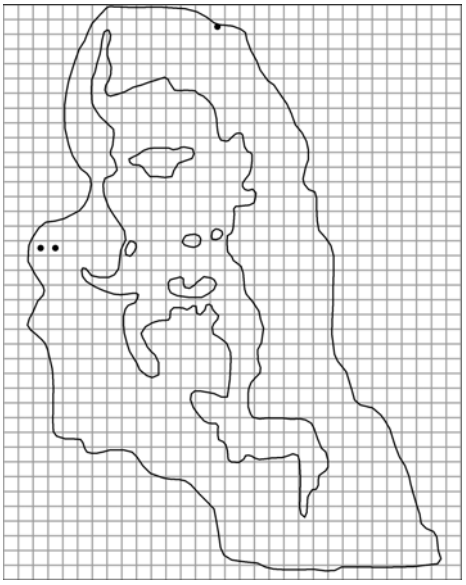
Huperzia selago



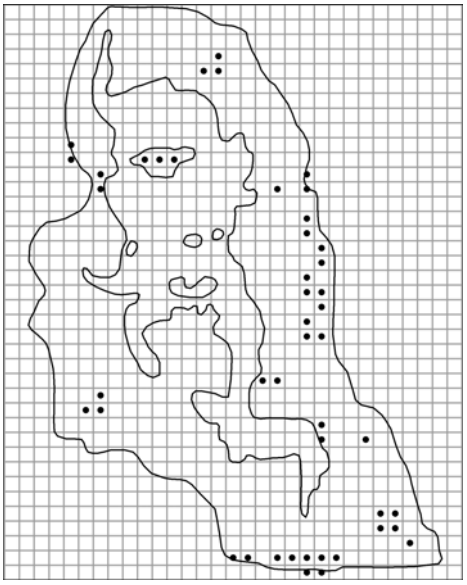
Hydrocharis morsus-ranae



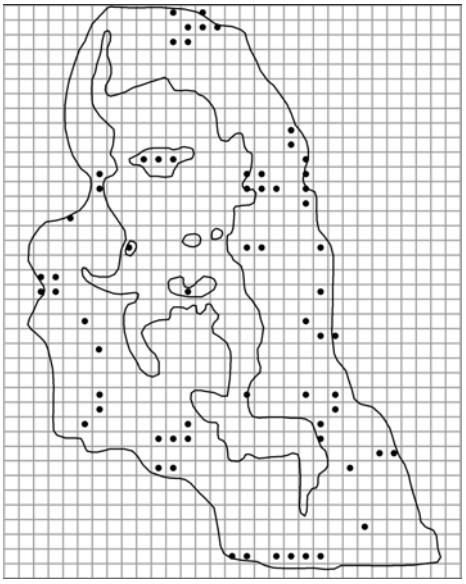
Hydrocotyle vulgaris



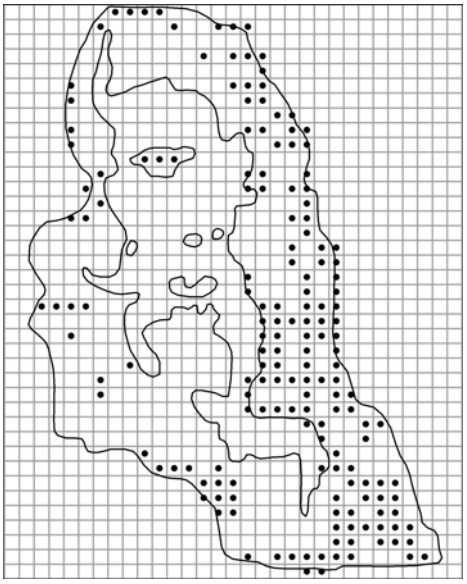
Hyoscyamus niger



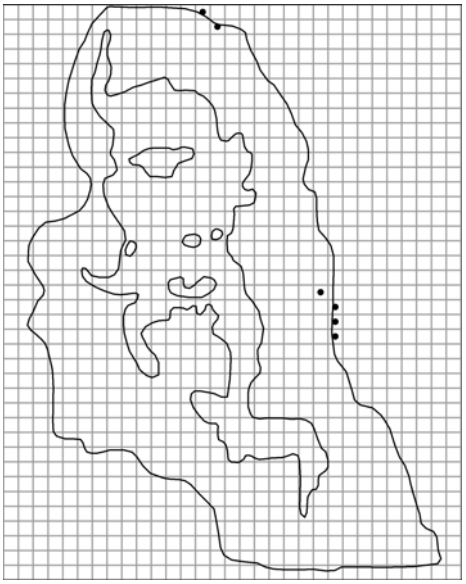
Hypericum maculatum



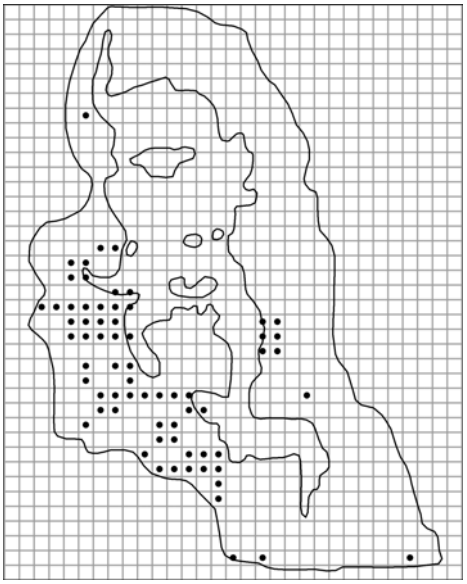
Hypericum perforatum



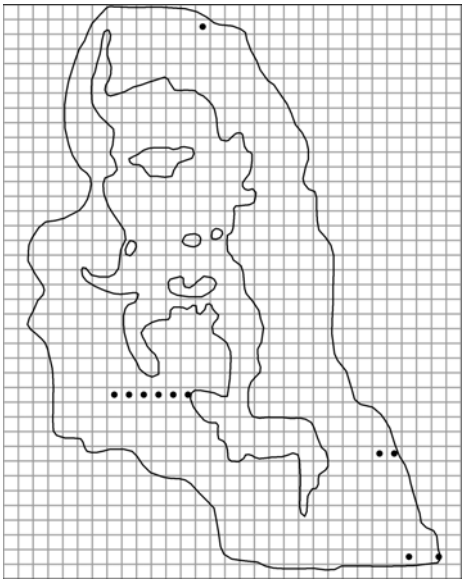
Hypochoeris radicata



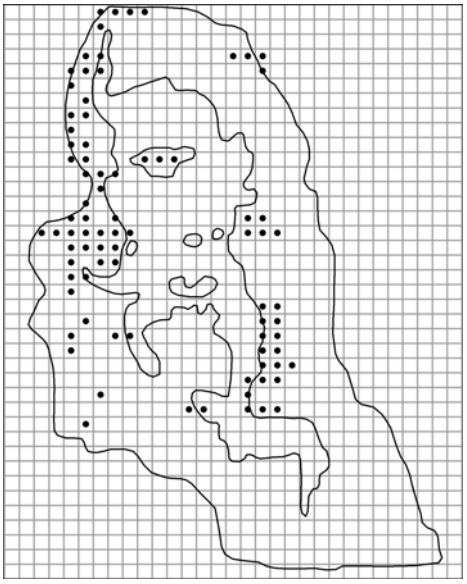
Impatiens glandulifera



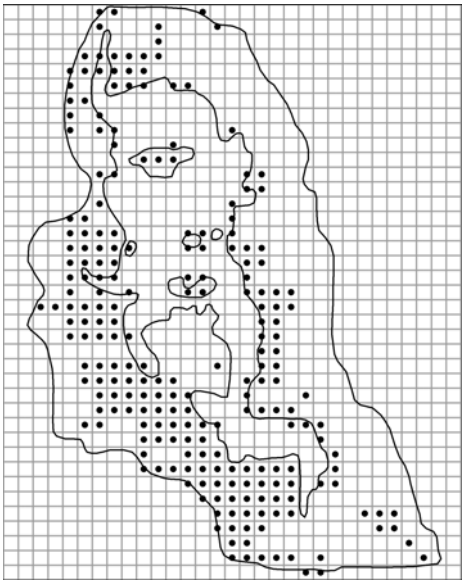
Impatiens noli-tangere



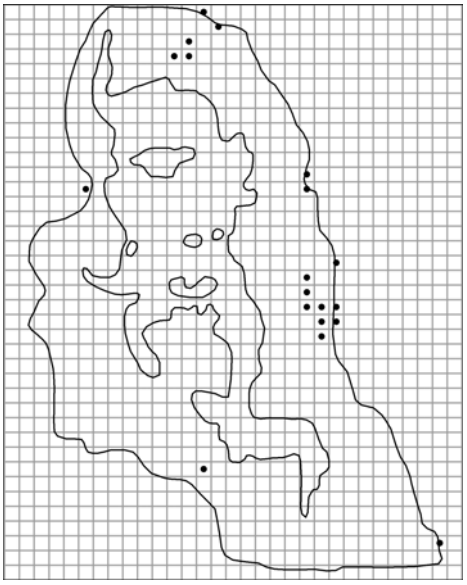
Impatiens parviflora



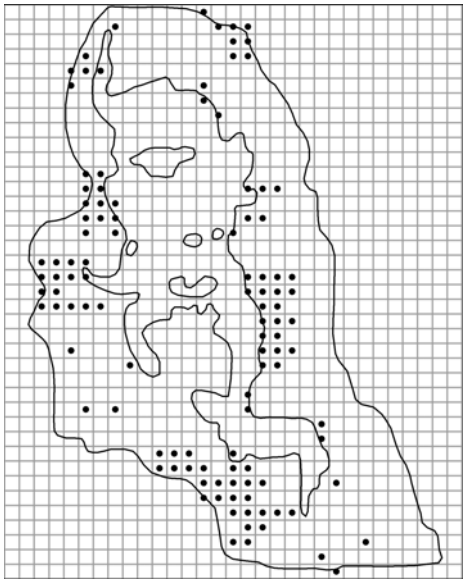
Inula salicina



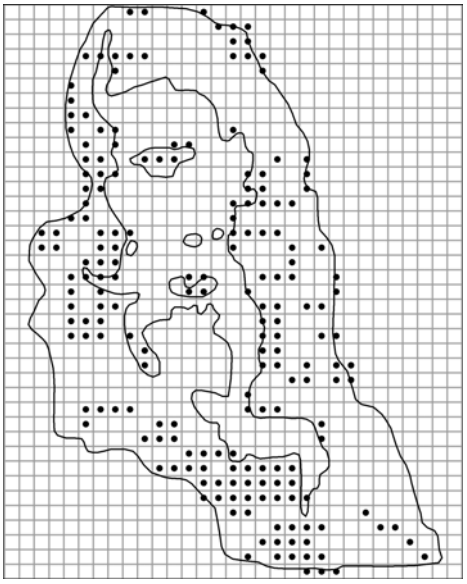
Iris pseudacorus



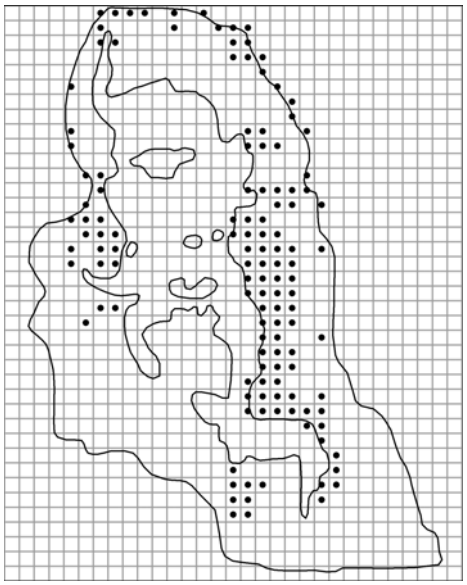
Jasione montana



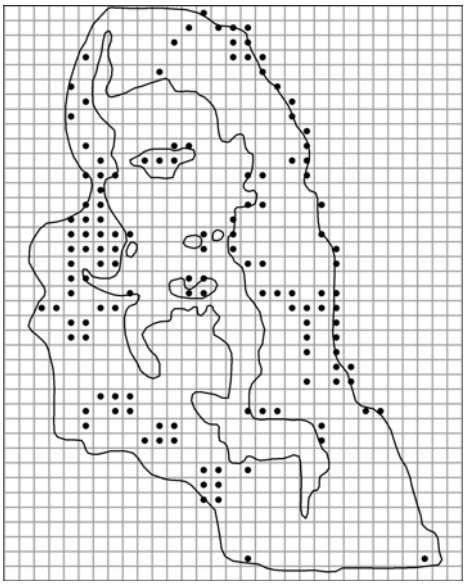
Juncus alpino-articulatus



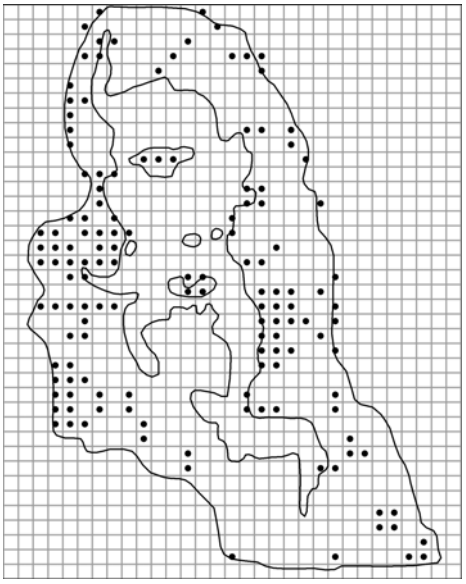
Juncus articulatus



Juncus balticus



Juncus bufonius



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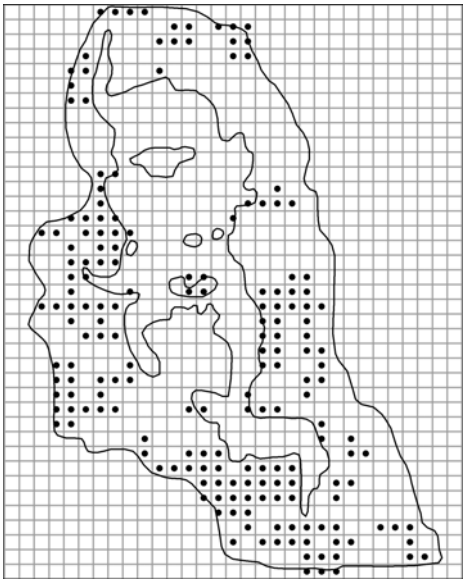

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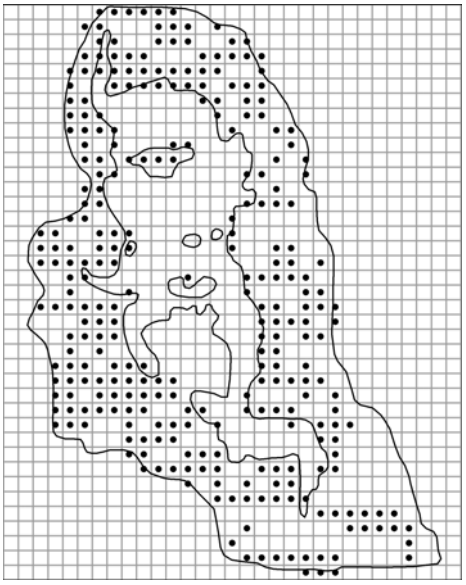

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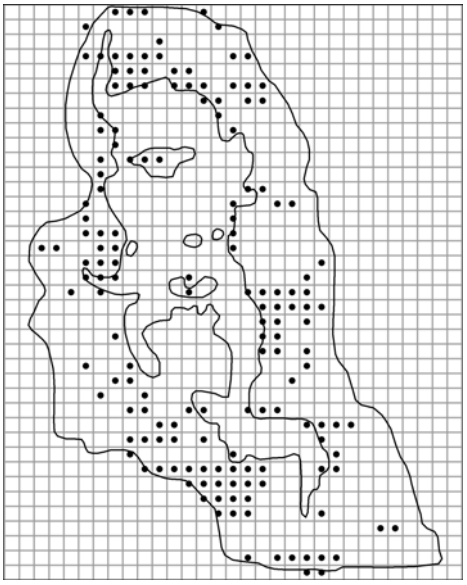

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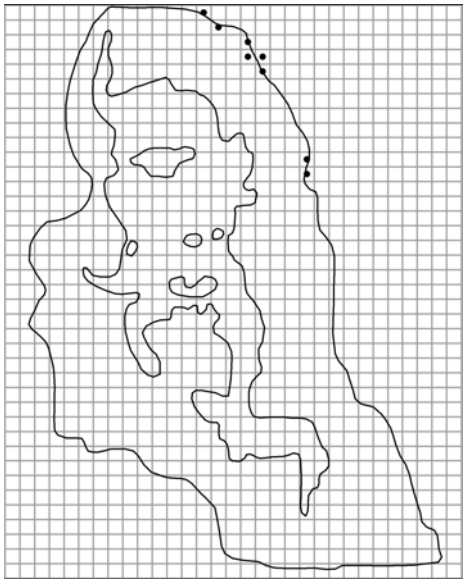

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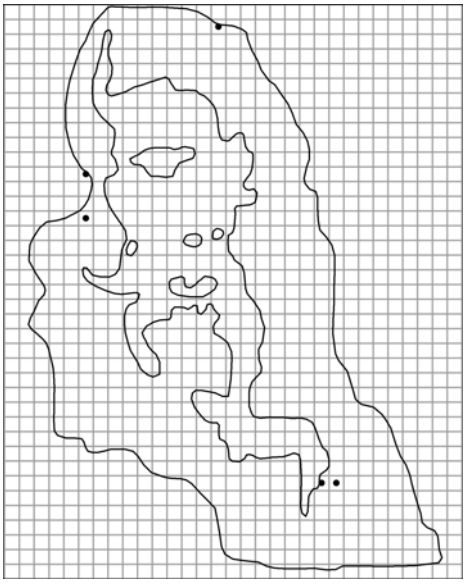

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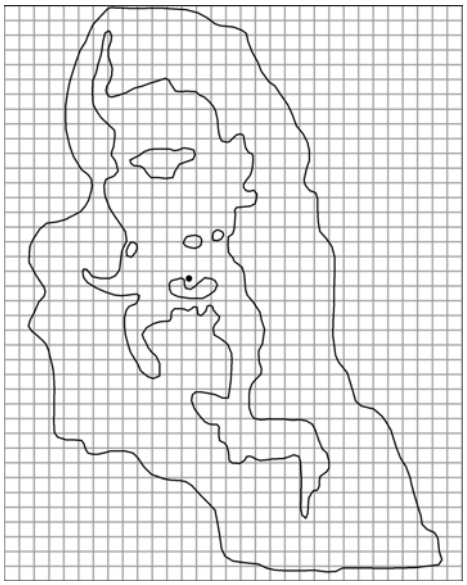

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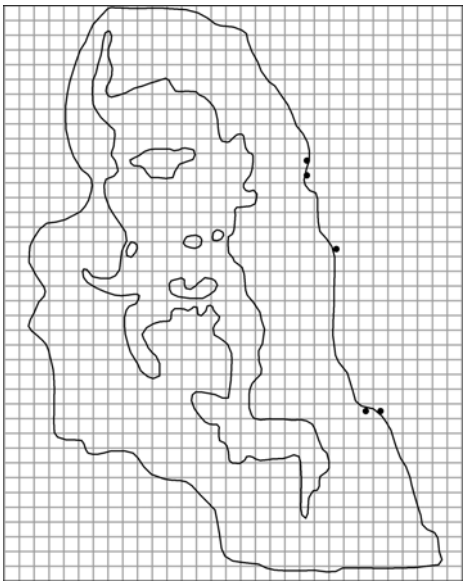

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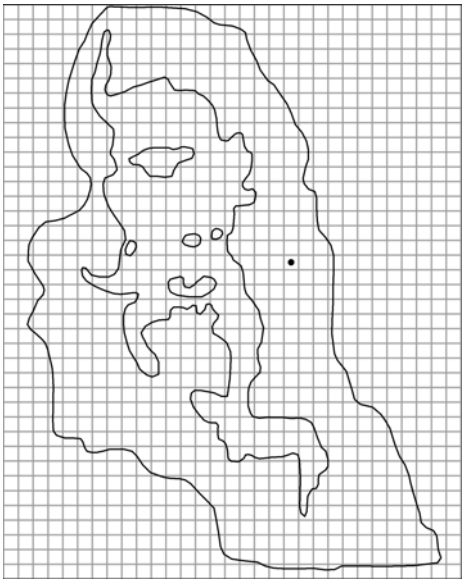

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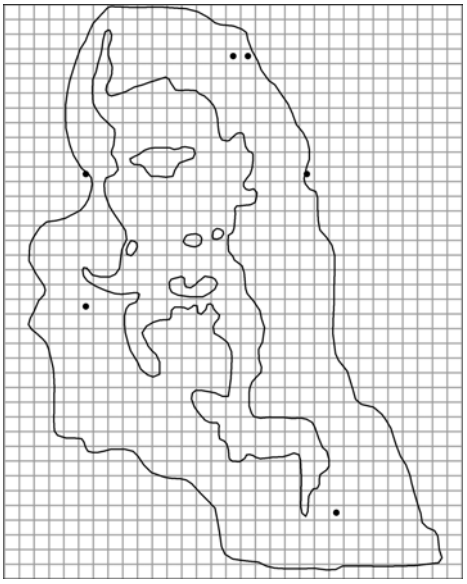

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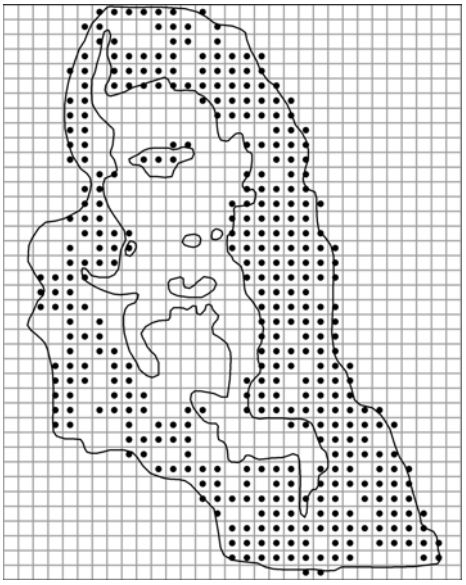
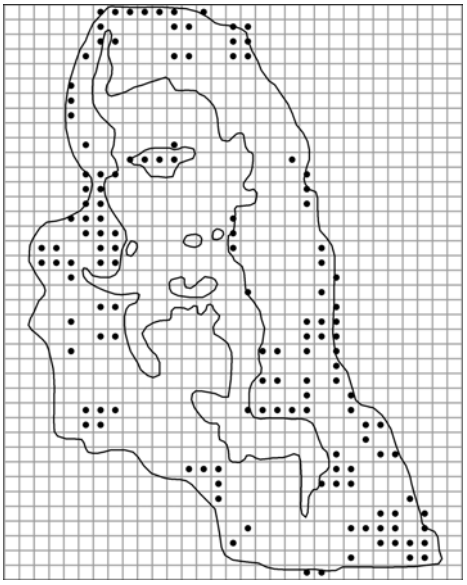
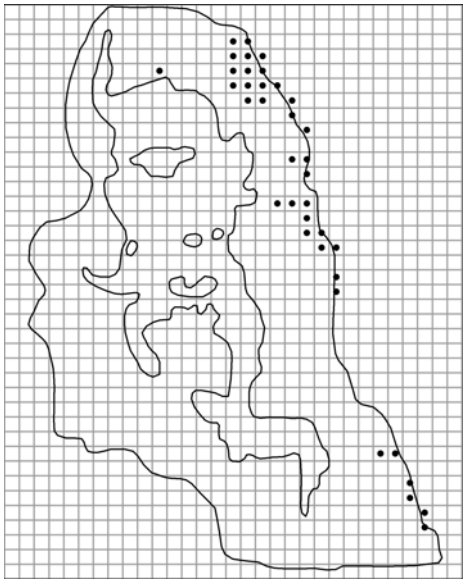


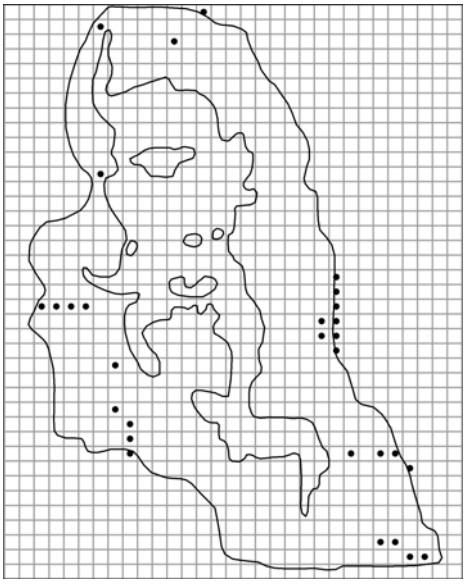
Juniperus communis



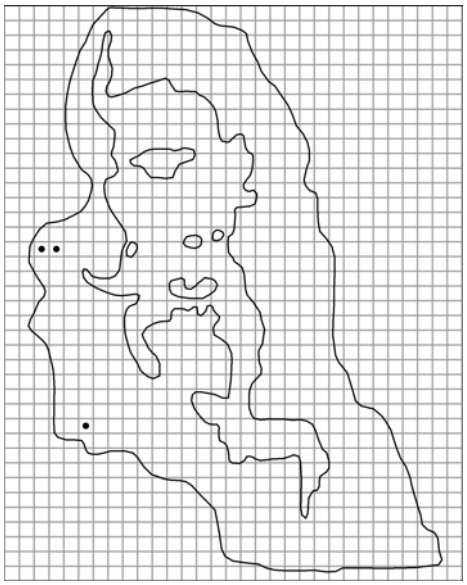
Knautia arvensis



Koeleria glauca



Lamium album



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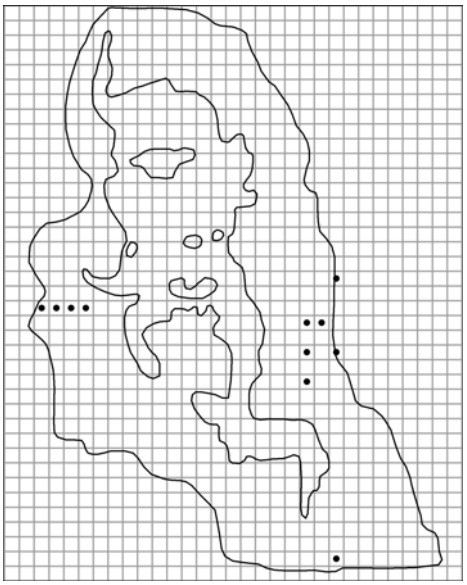

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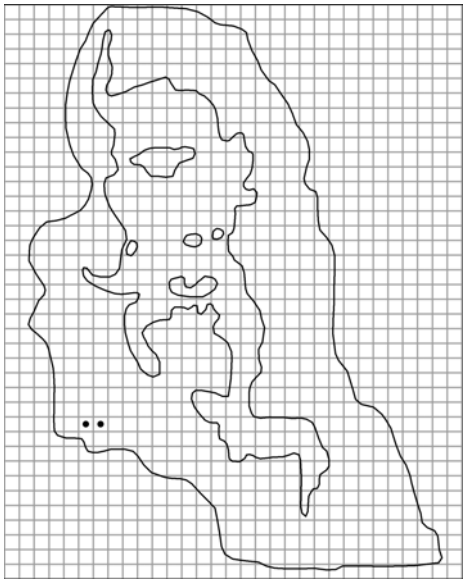

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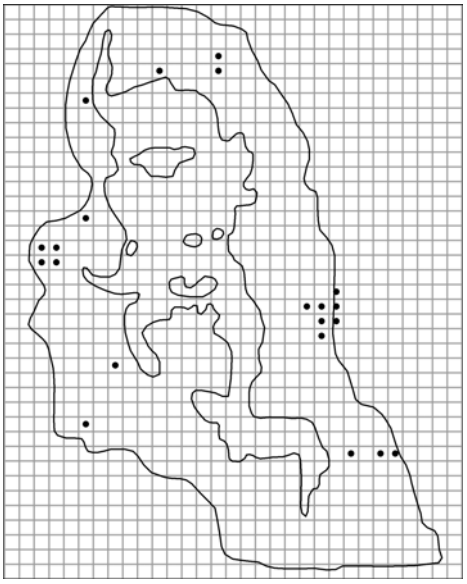

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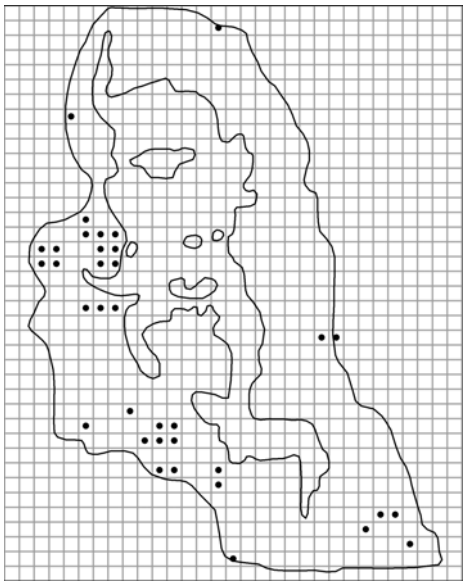
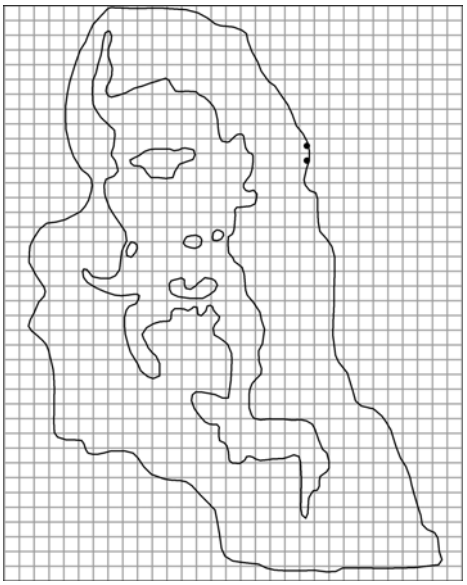
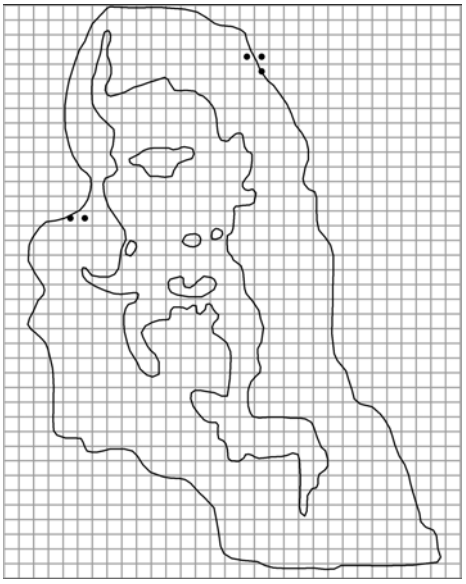


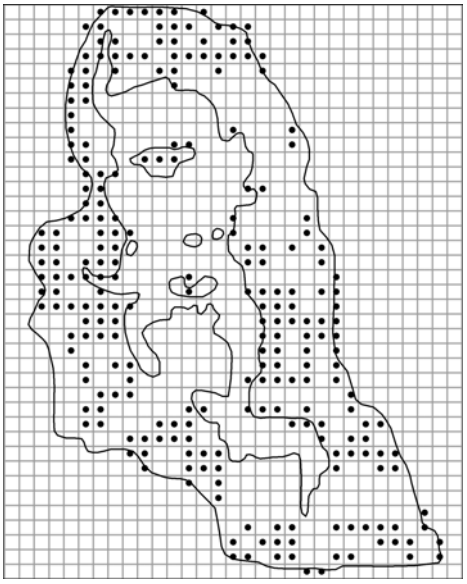
Lapsana communis



Lathyrus maritimus



Lathyrus palustris



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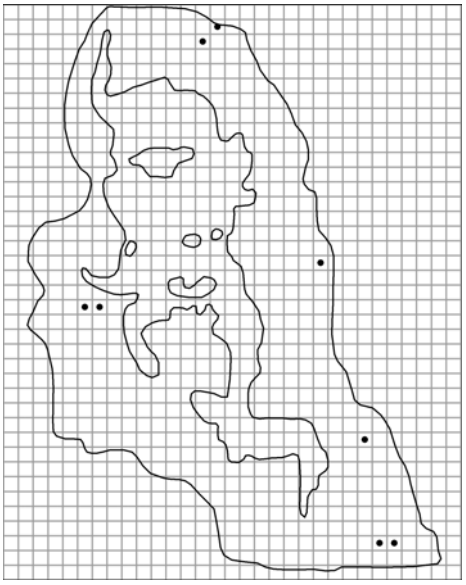

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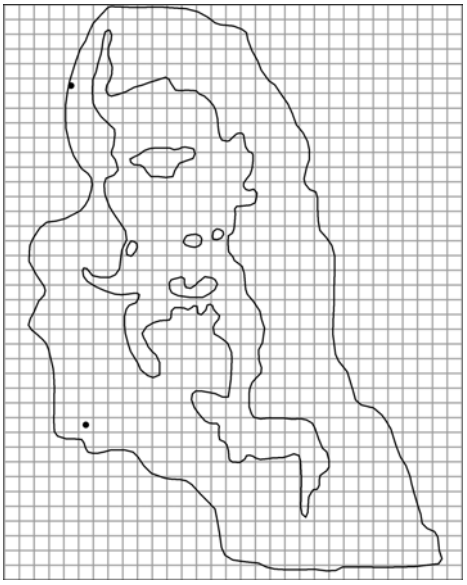

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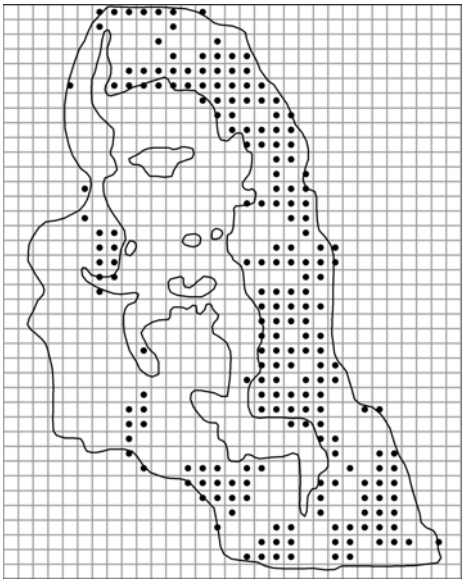
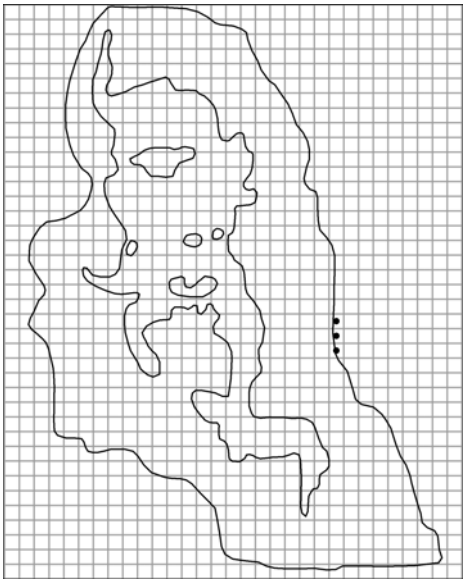
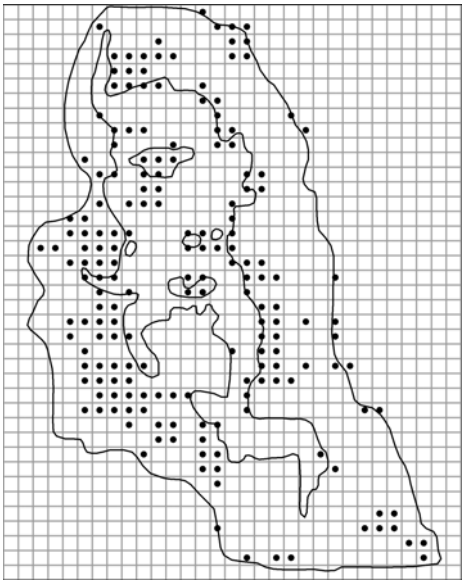


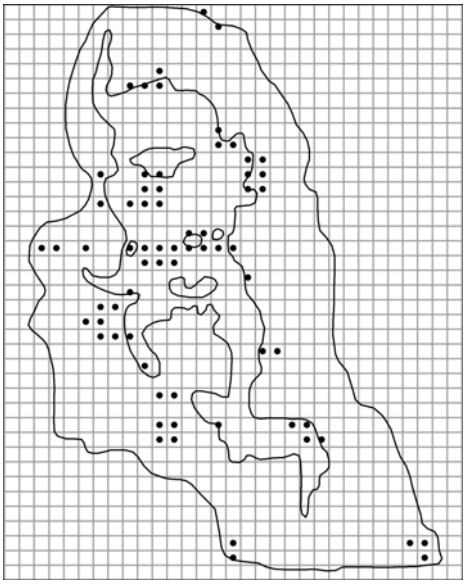
Ledum palustre



Lemna gibba



Lemna minor



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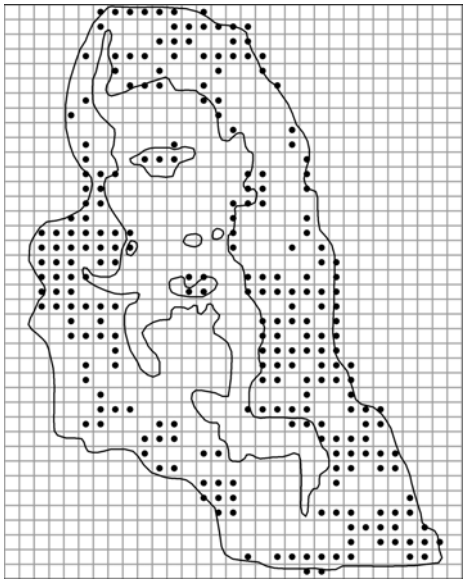
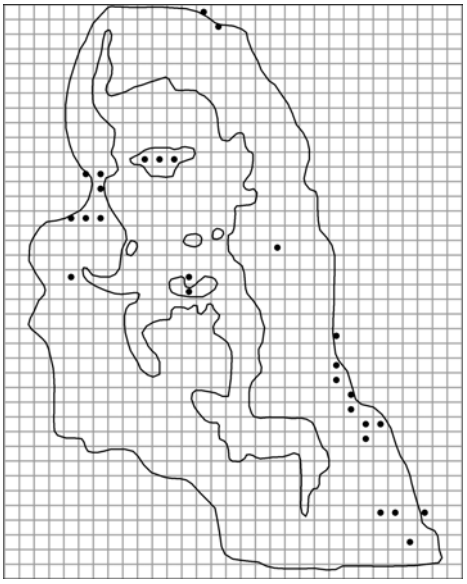


Leontodon autumnalis



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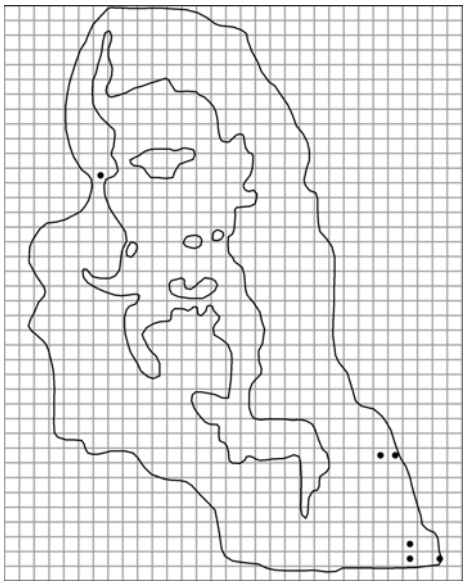
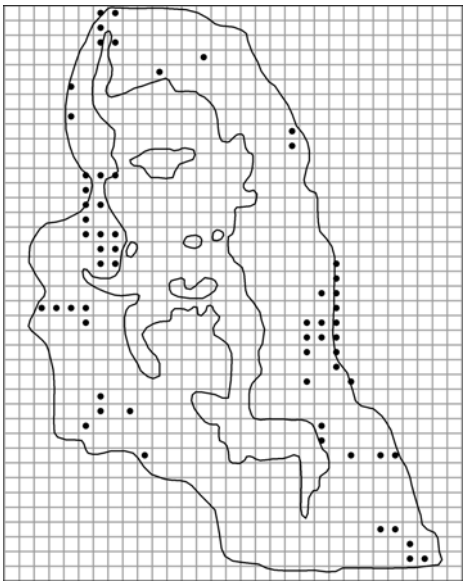
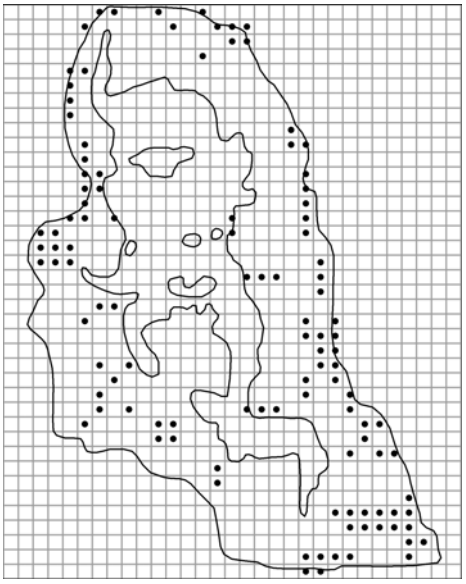


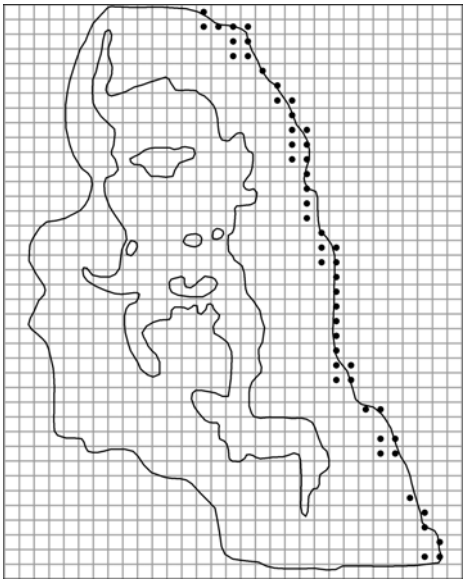
Leonurus quinquelobatus



Lepidotheca suaveolens



Leucanthemum vulgare



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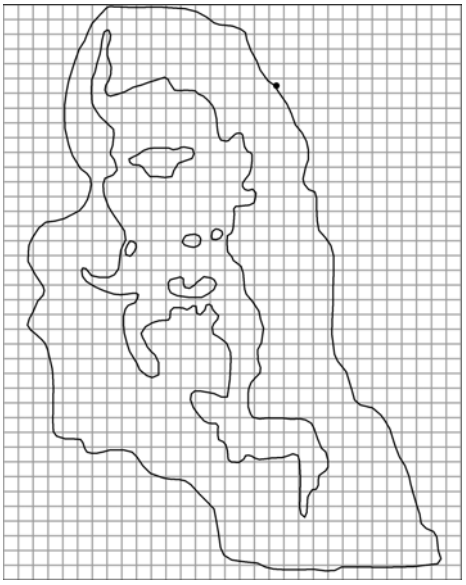
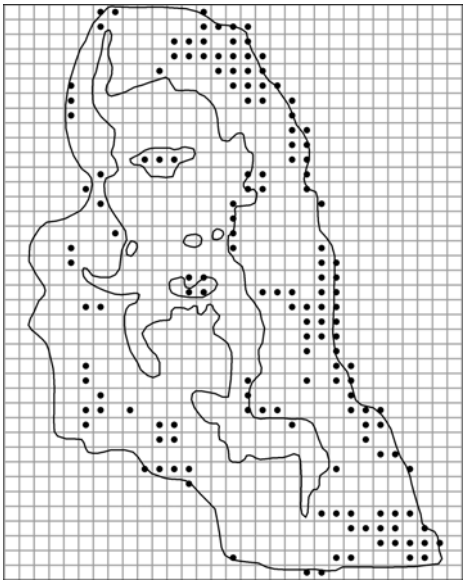
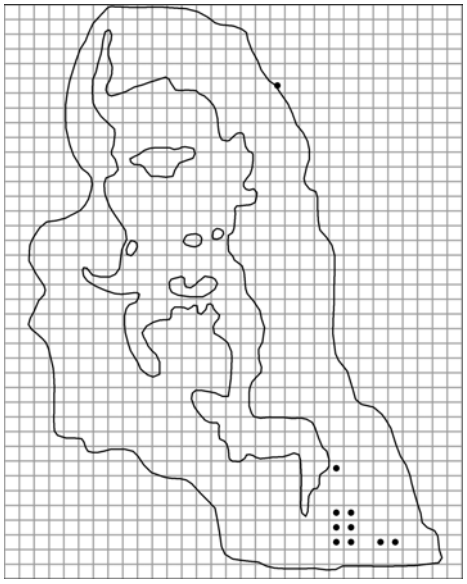


Linaria loeselii



Linaria vulgaris



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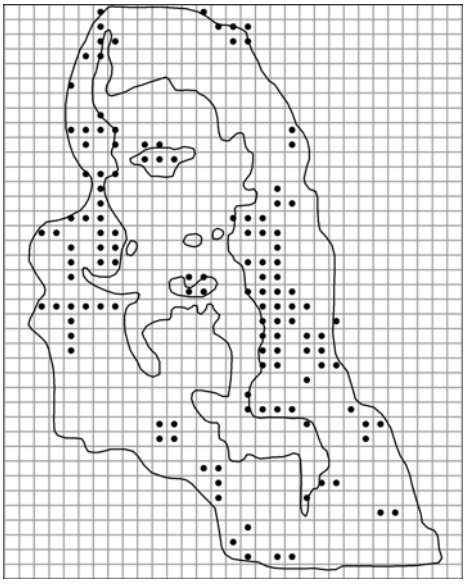
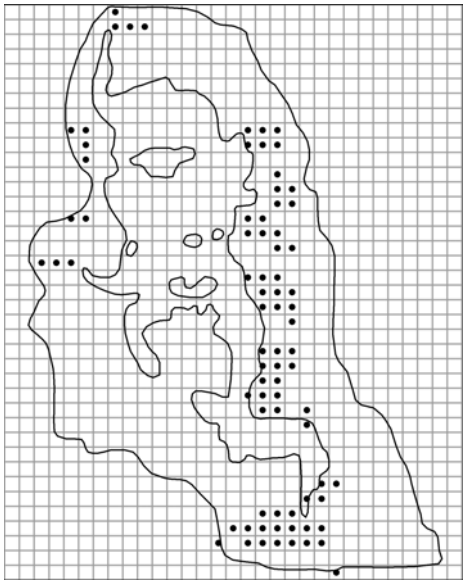
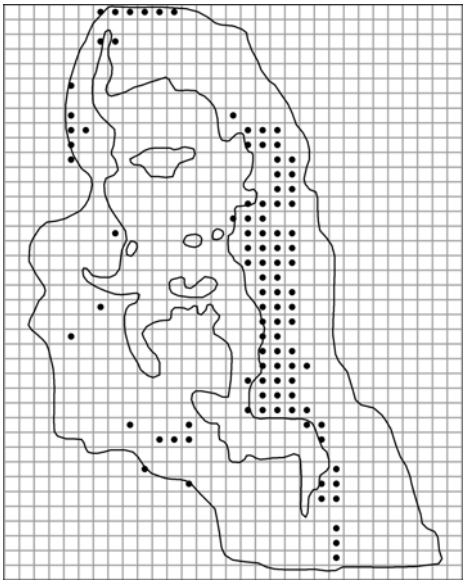


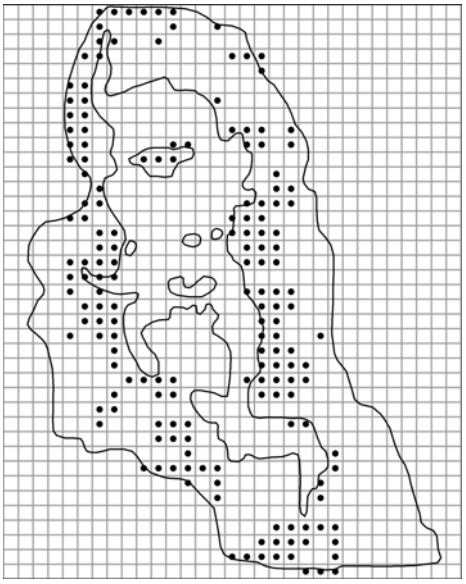
Linum catharticum



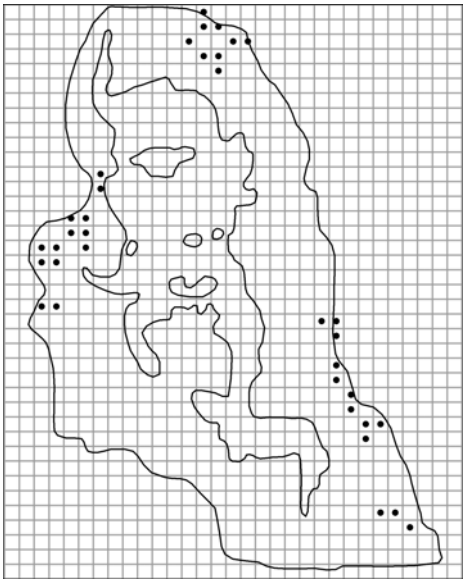
Liparis loeselii



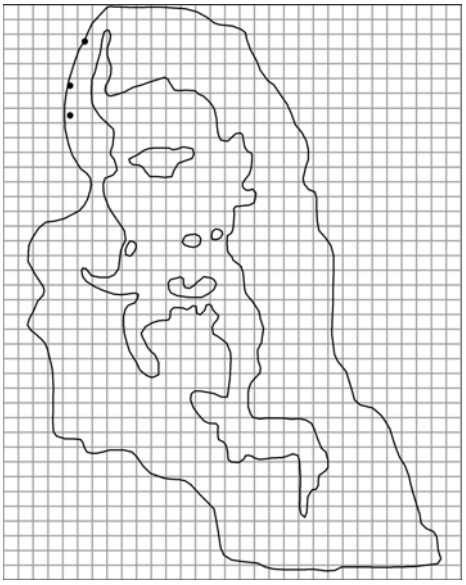
Listera cordata



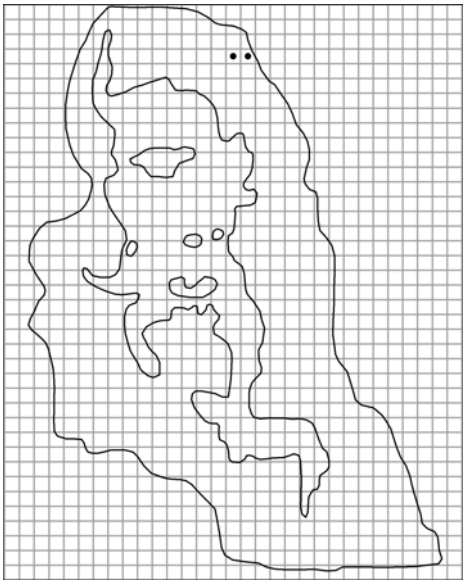
Listera ovata



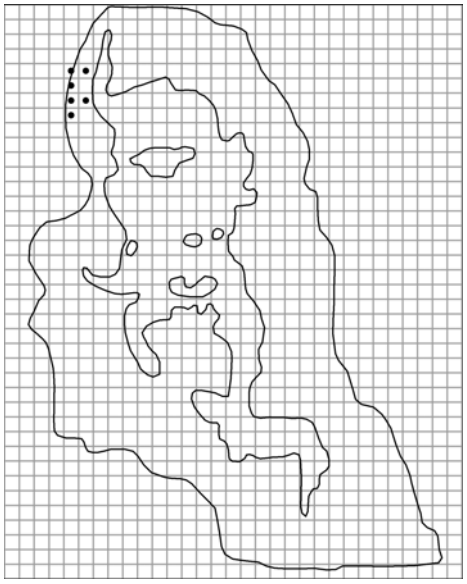
Lolium perenne



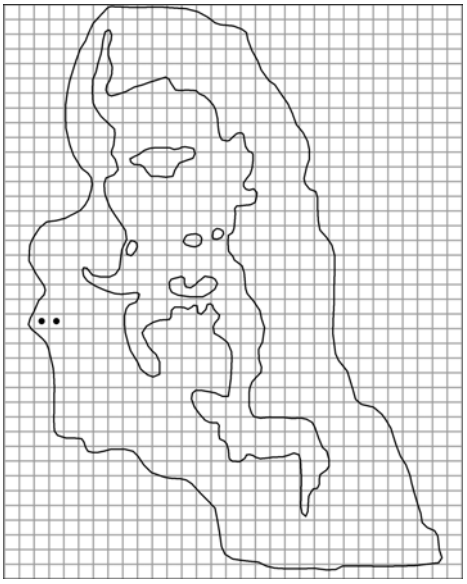
Lonicera caprifolium



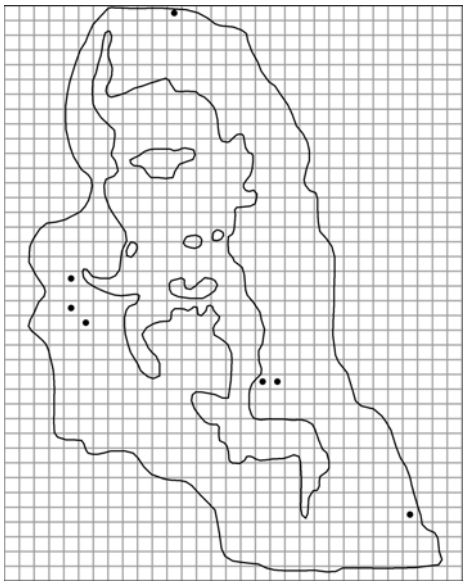
Lonicera tatarica



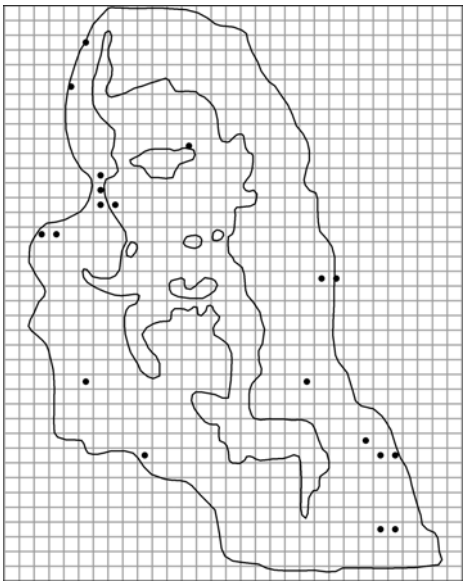
Lonicera xylosteum



Lotus arvensis



Lotus balticus



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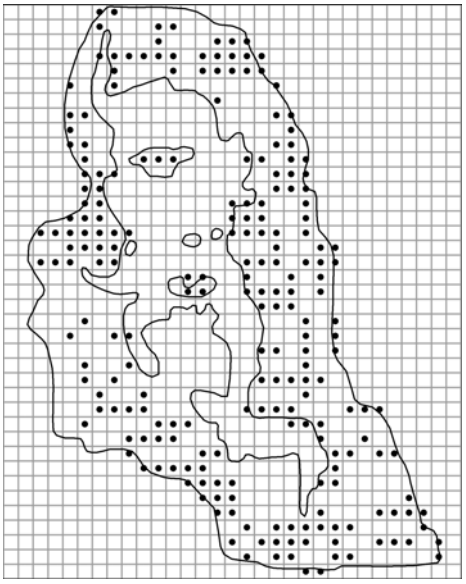
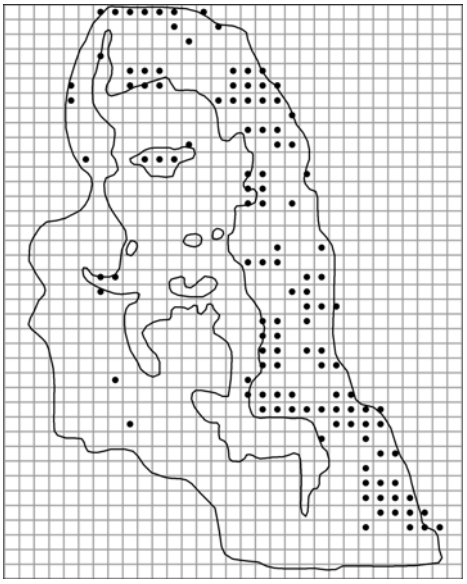
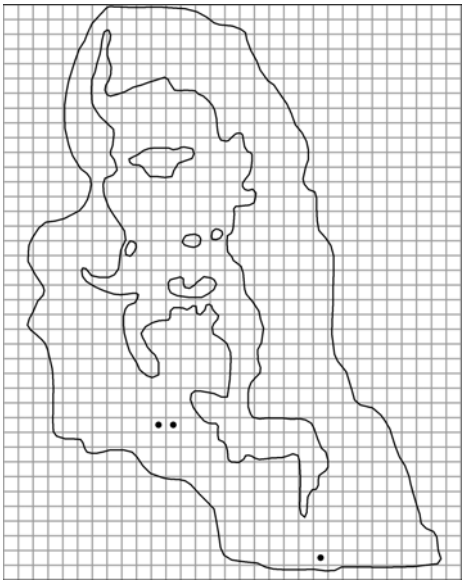


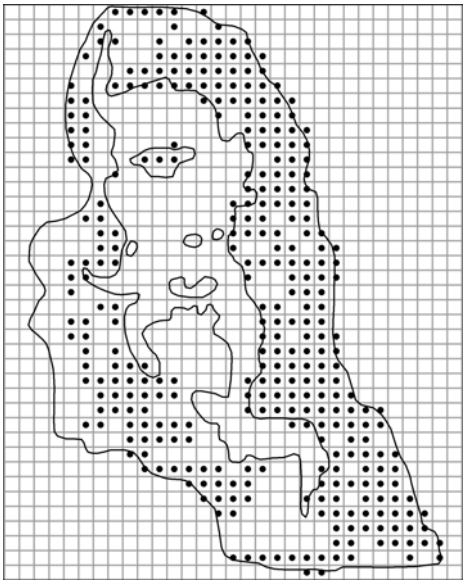
Luzula campestris



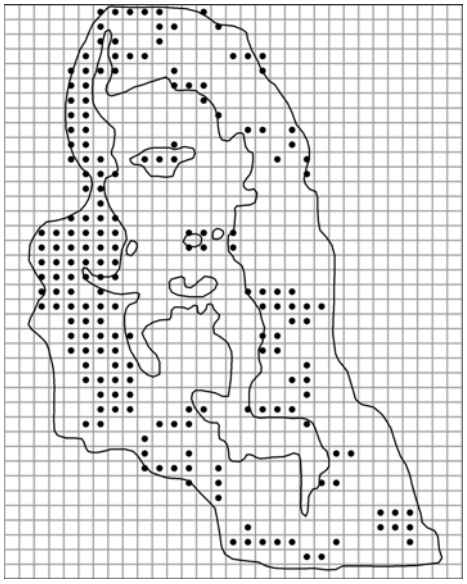
Luzula multiflora



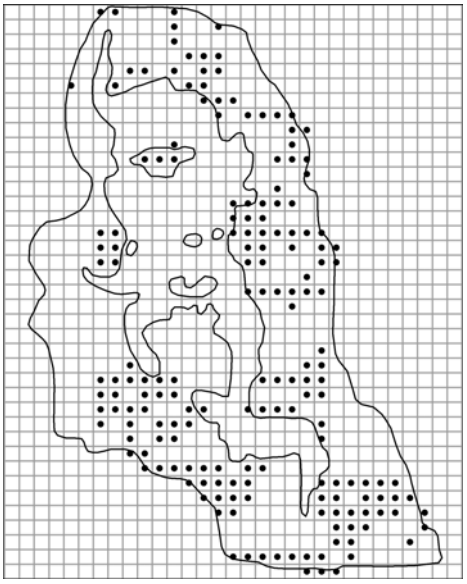
Luzula pallidula



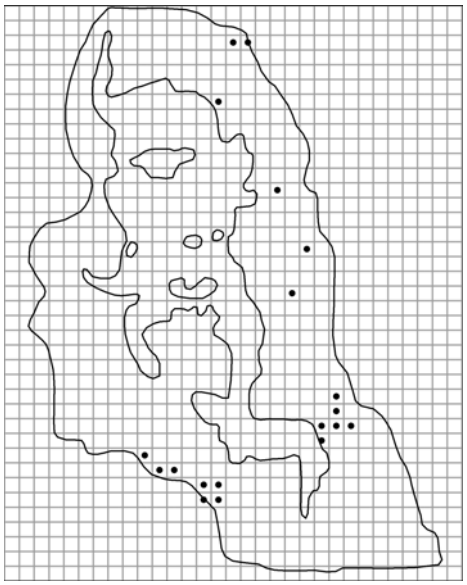
Luzula pilosa



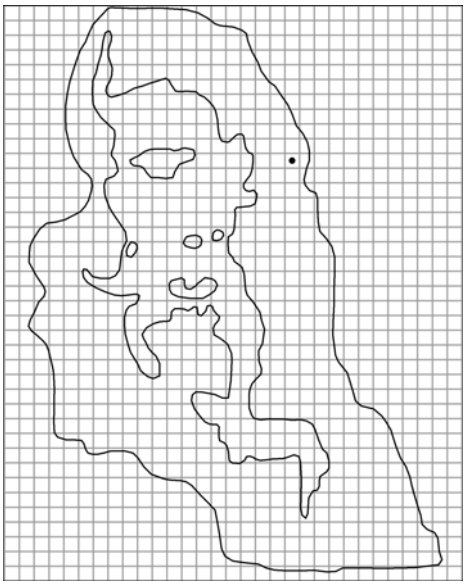
Lychnis flos-cuculi



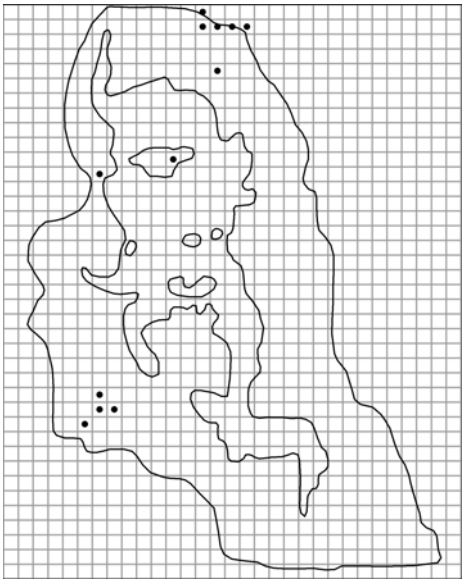
Lycopodium annotinum



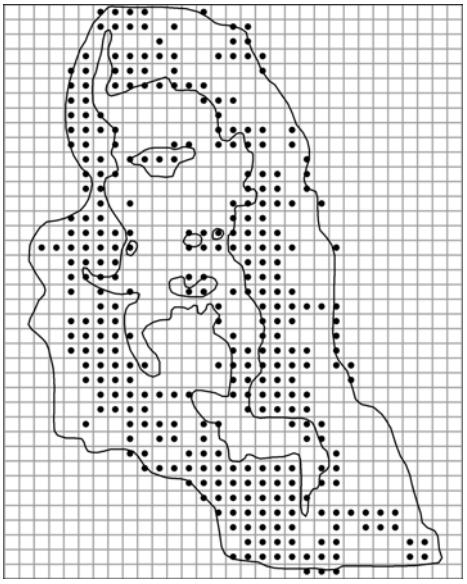
Lycopodium clavatum



Lycopodium dubium



Lycopsis arvensis



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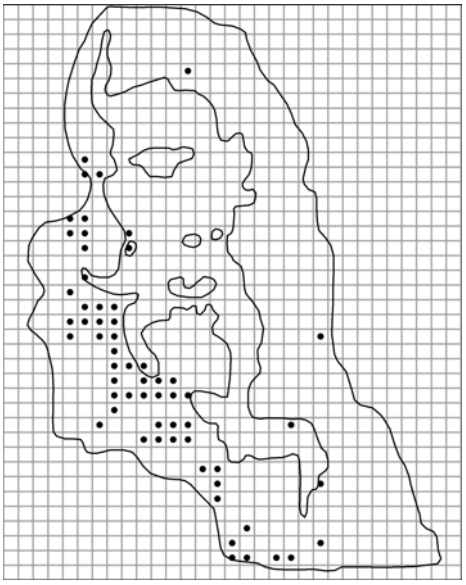

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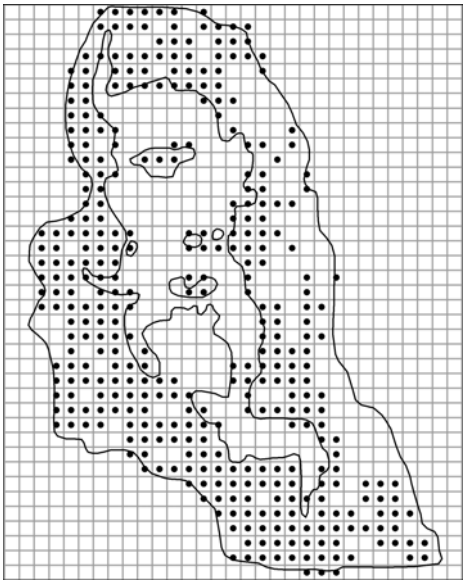

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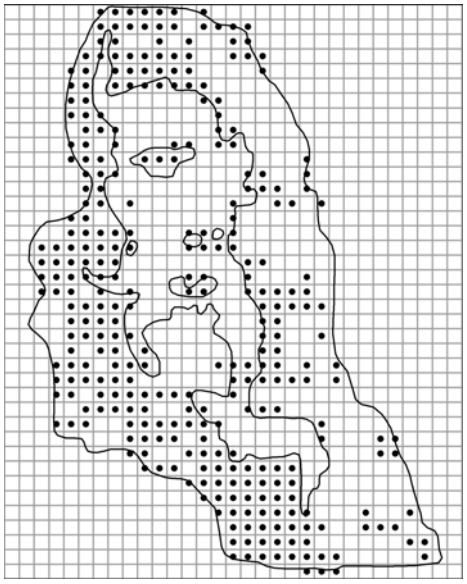

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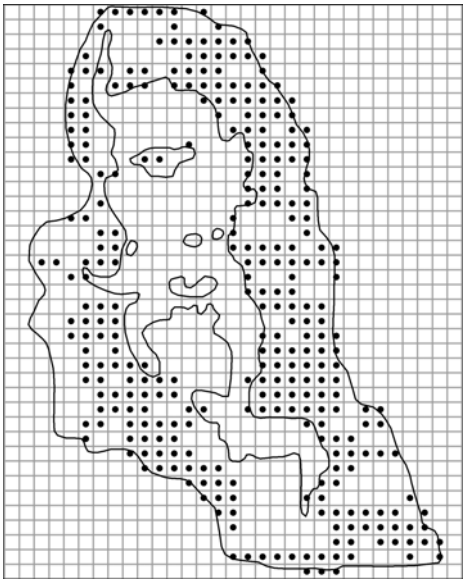

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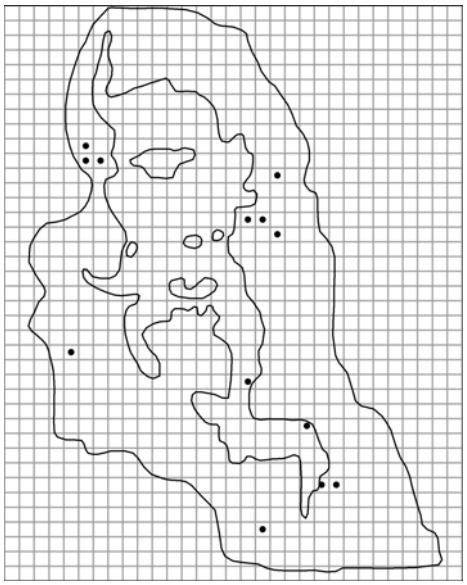

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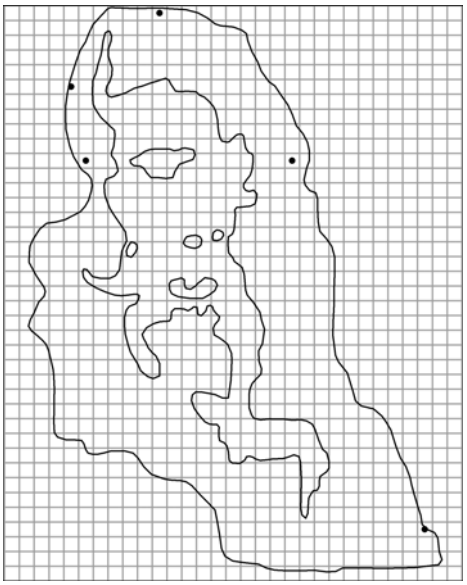

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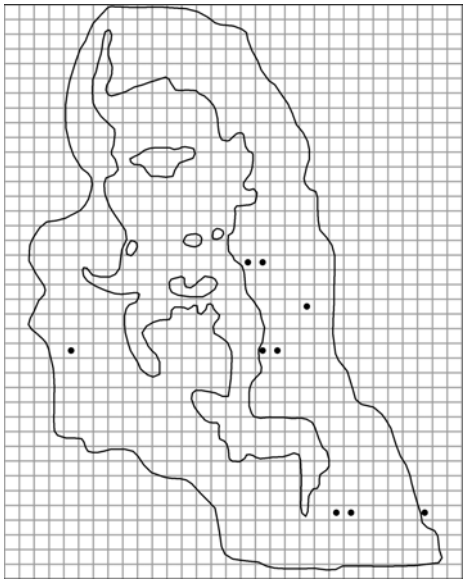

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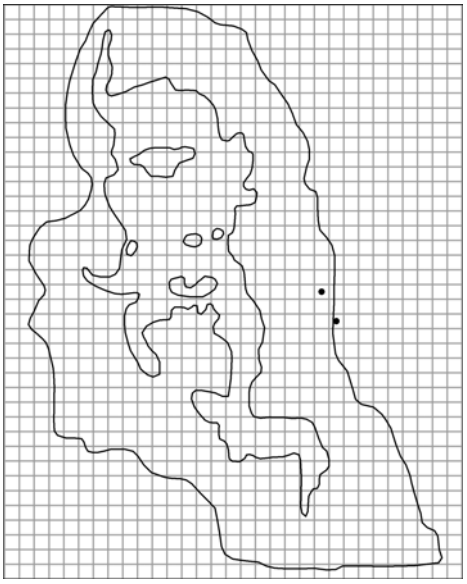

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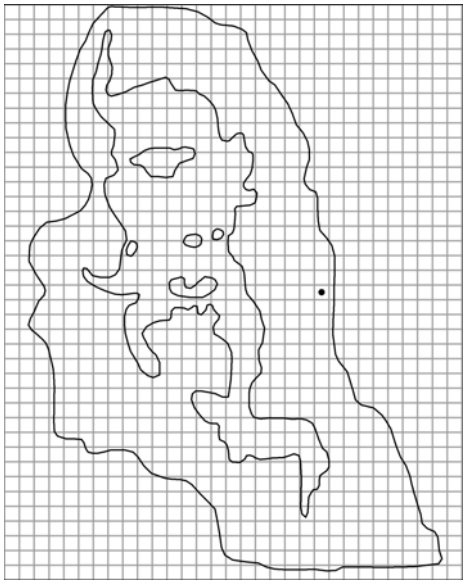

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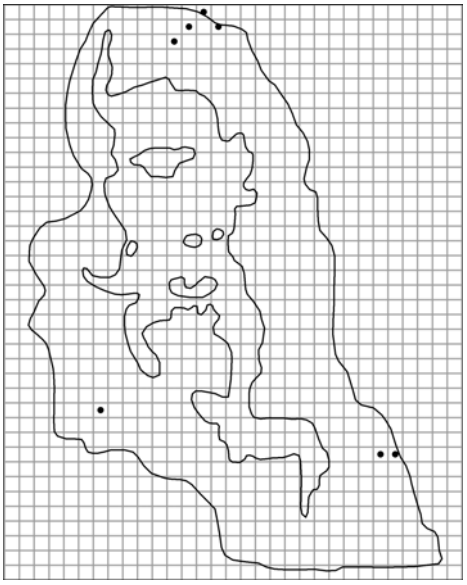

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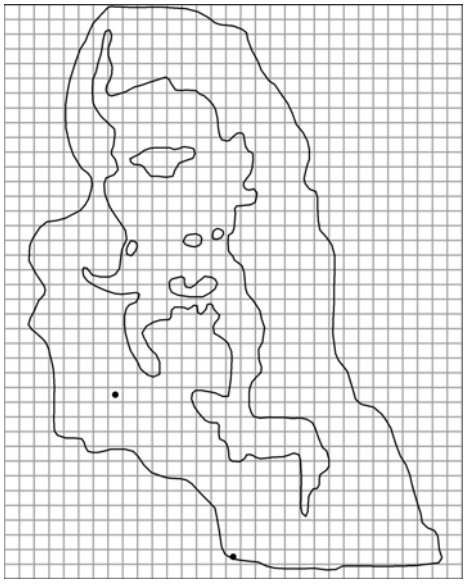

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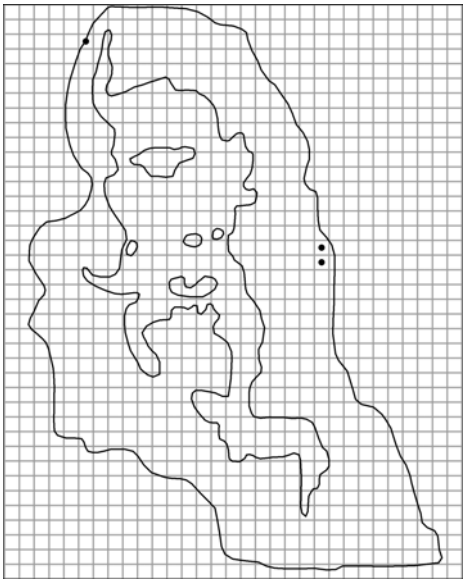

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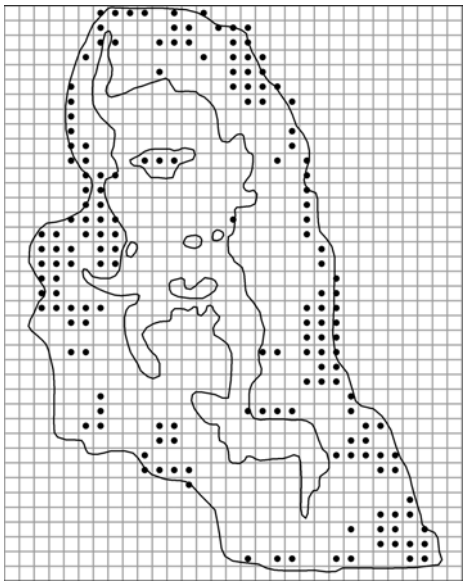

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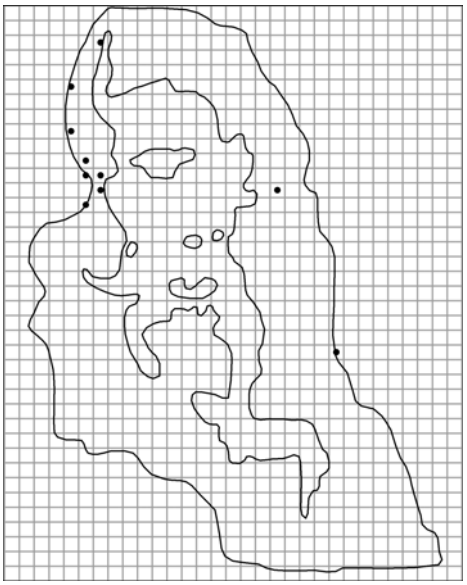

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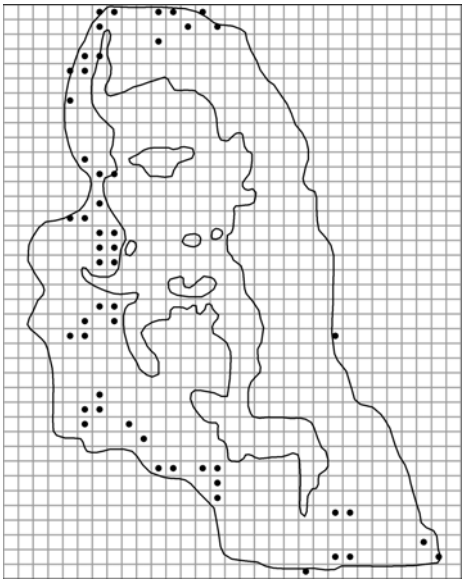

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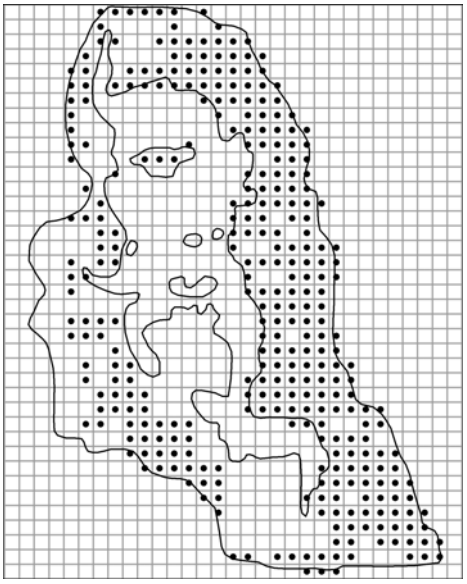

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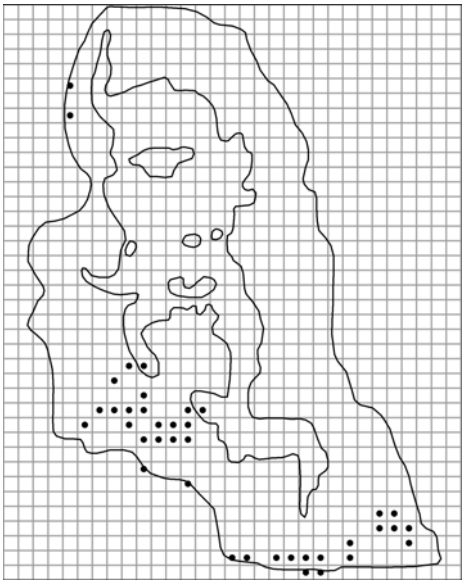

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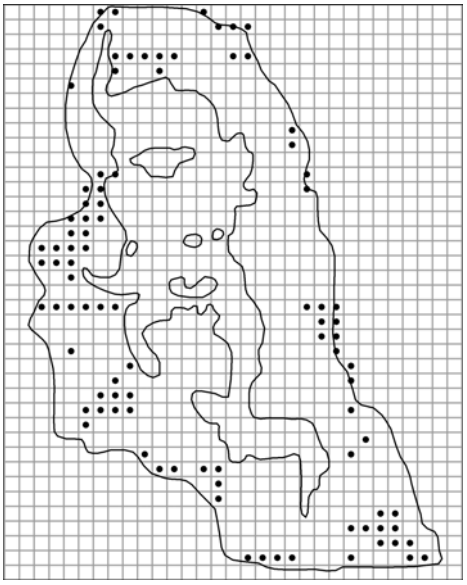
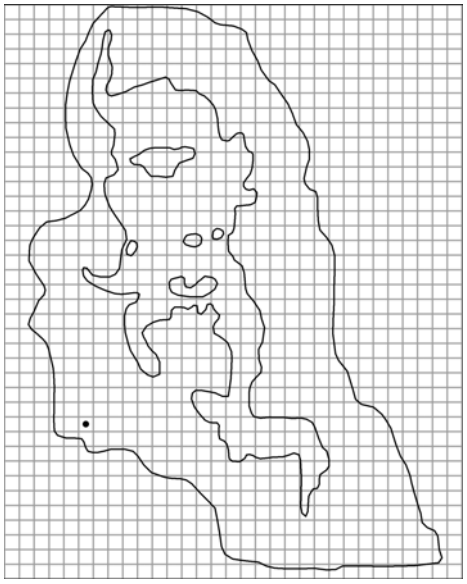


Melandrium album



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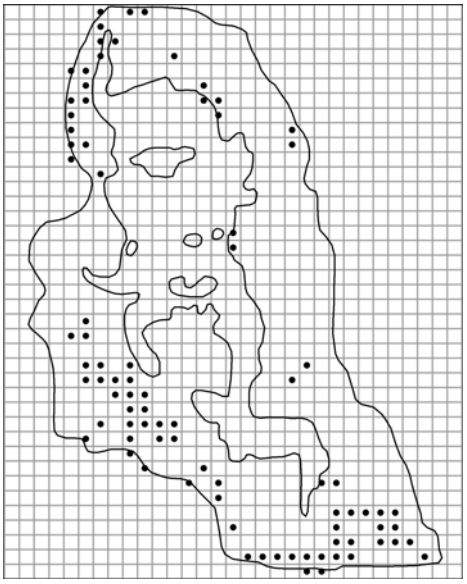

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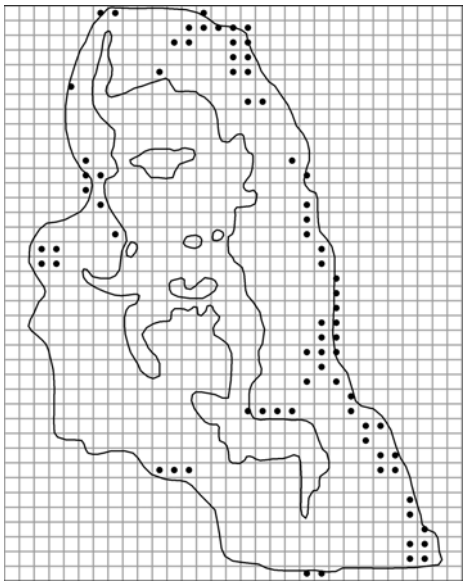

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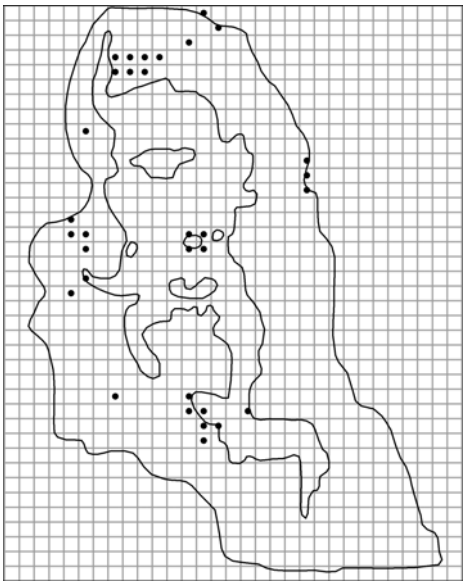

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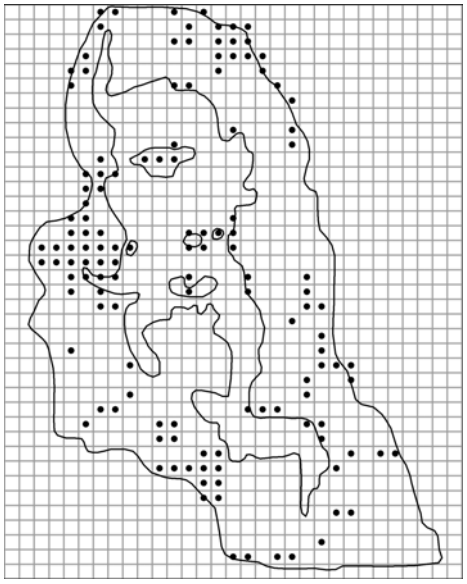

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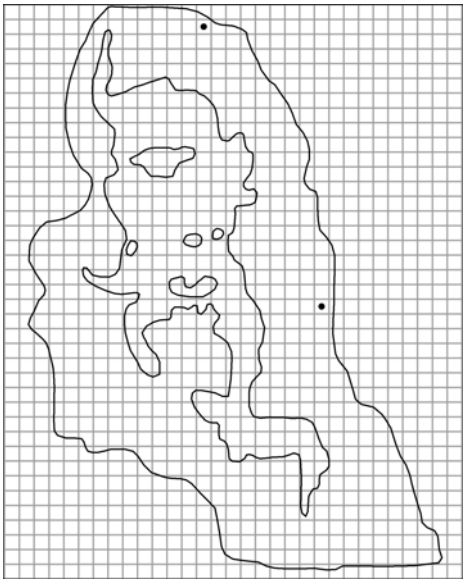

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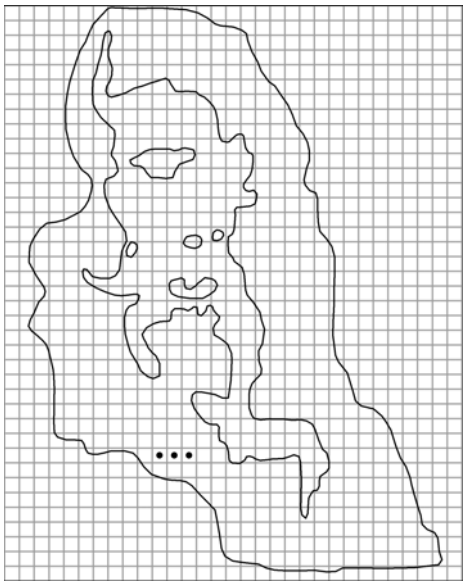

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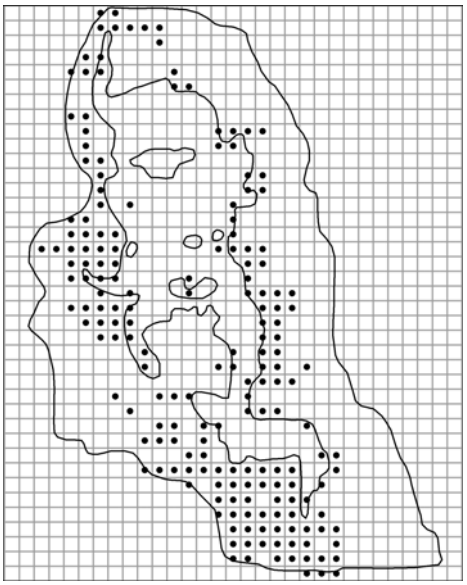

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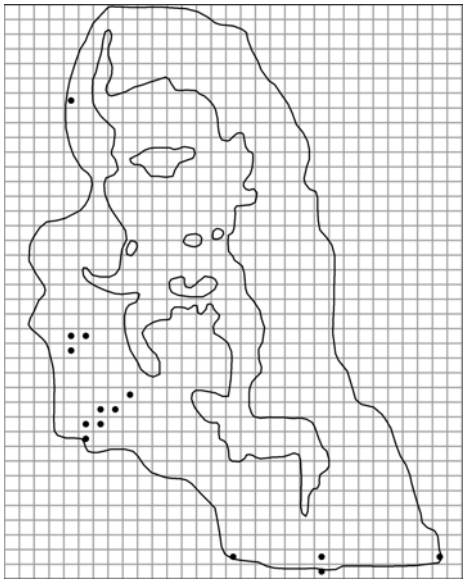

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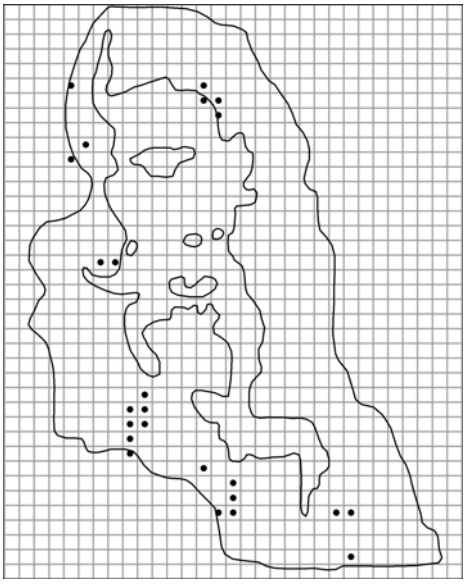

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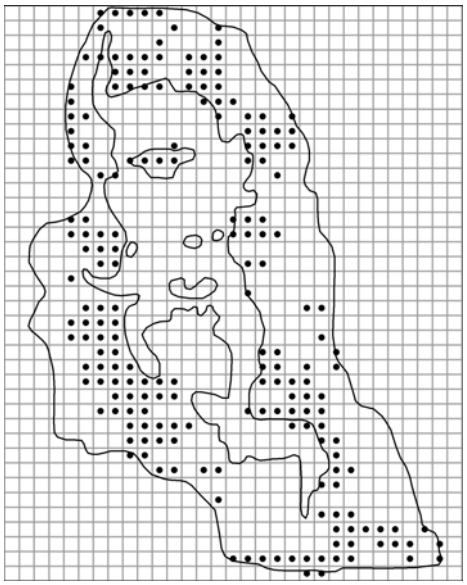

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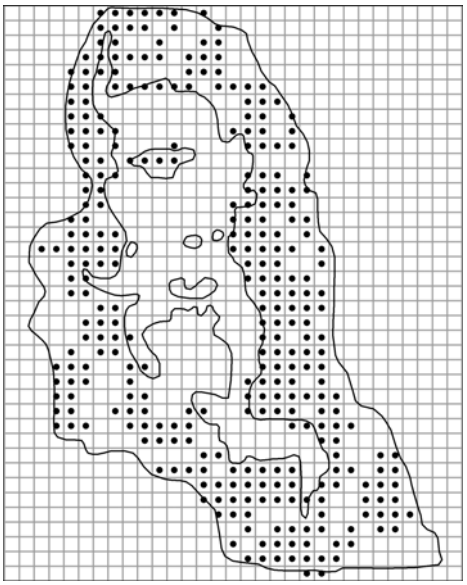

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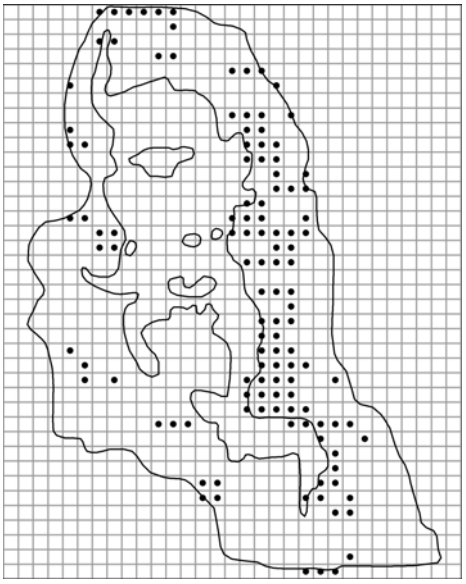

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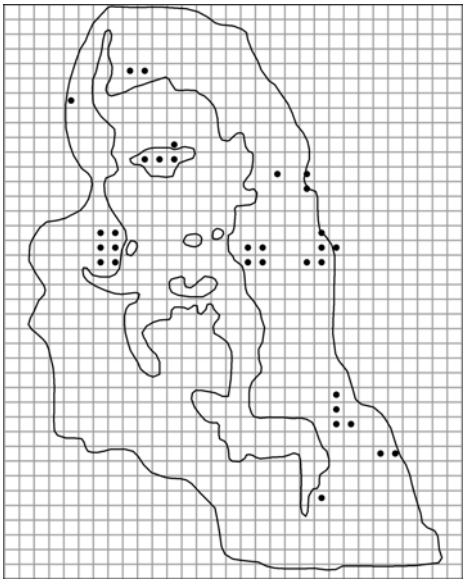

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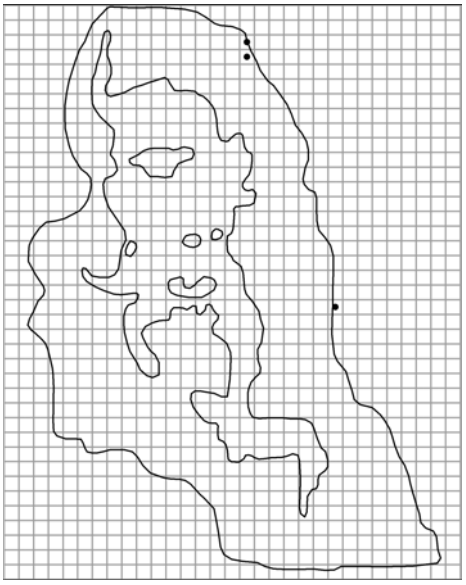

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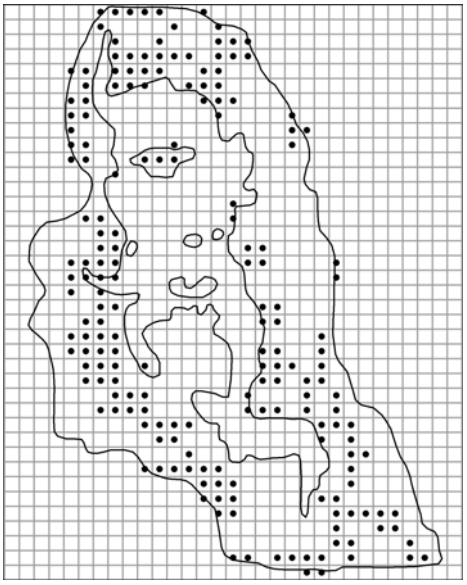

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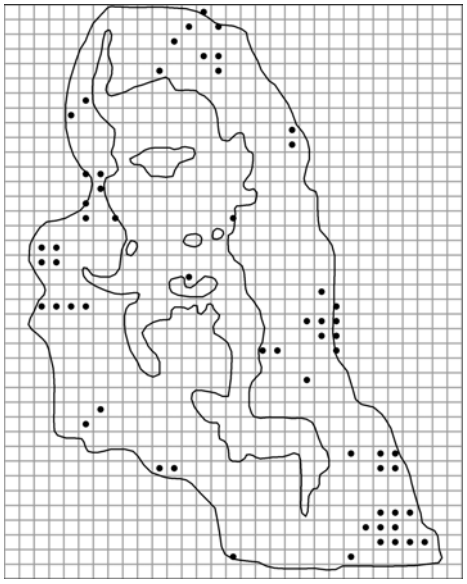

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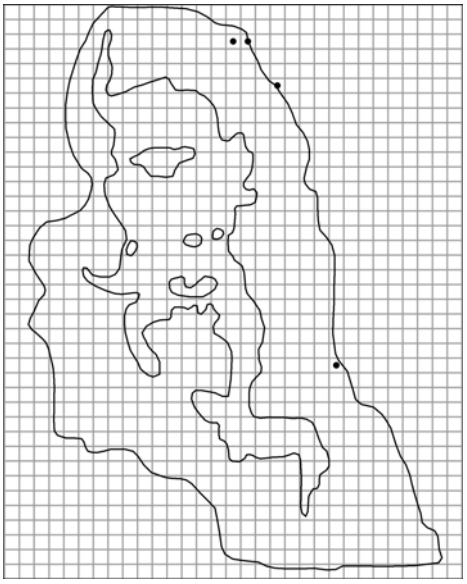

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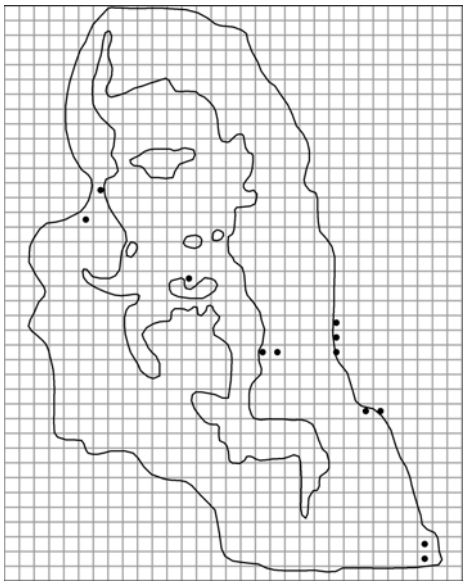

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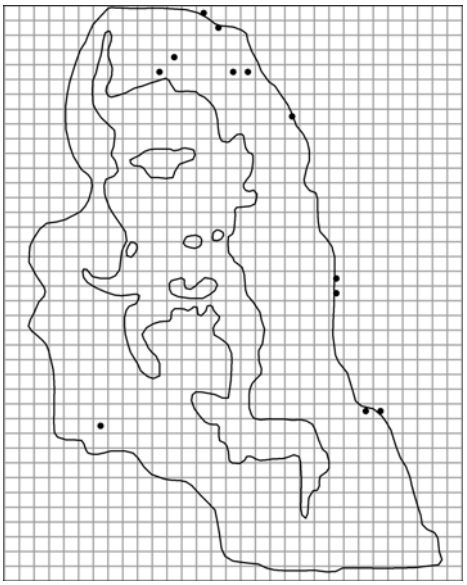

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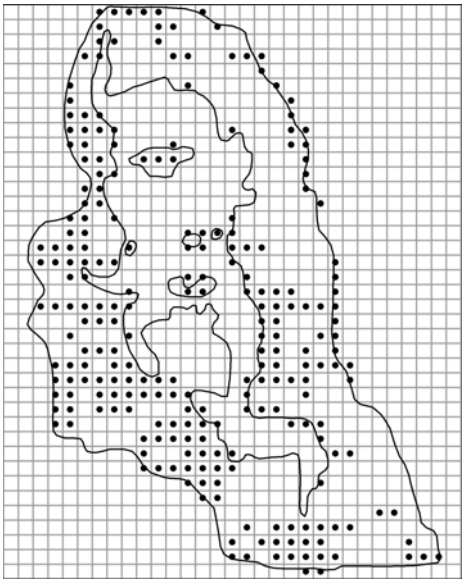

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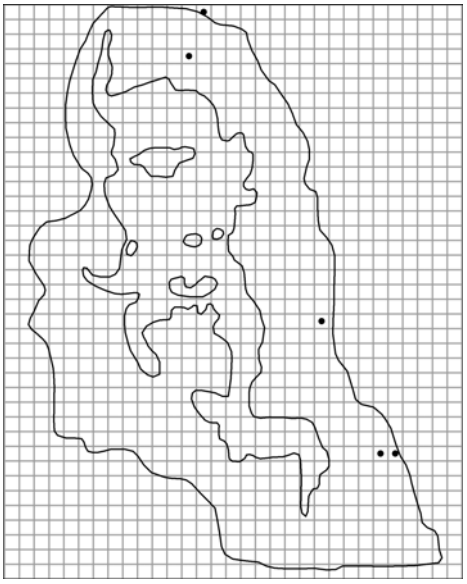

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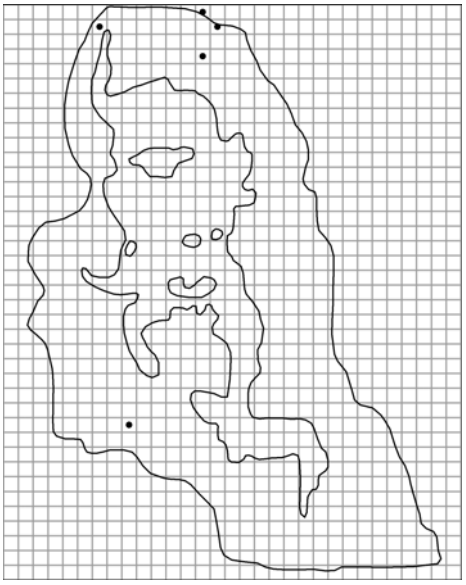

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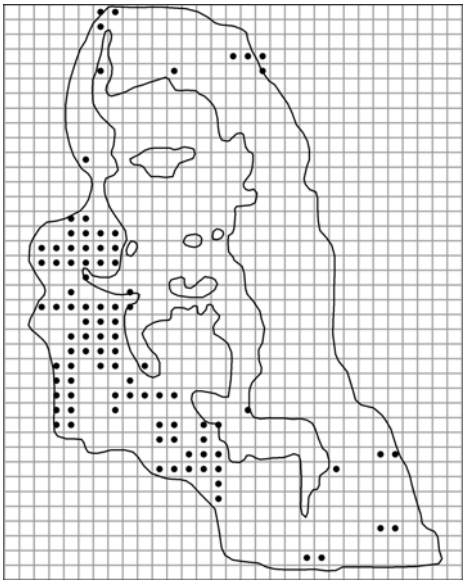

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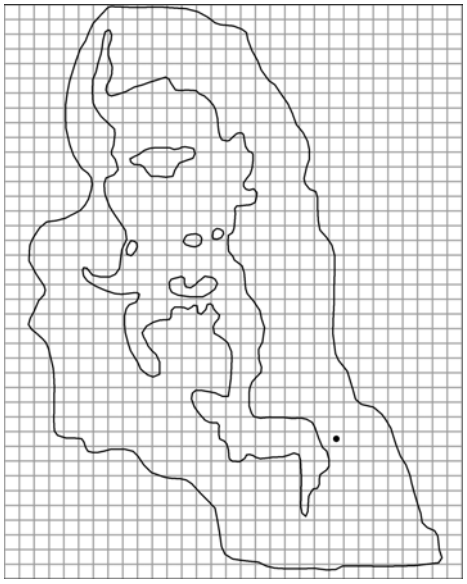

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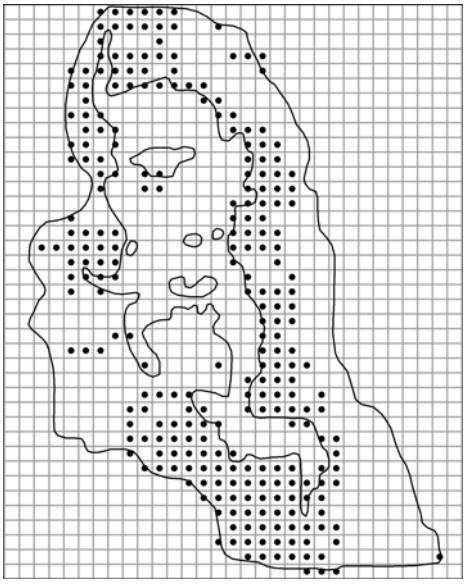

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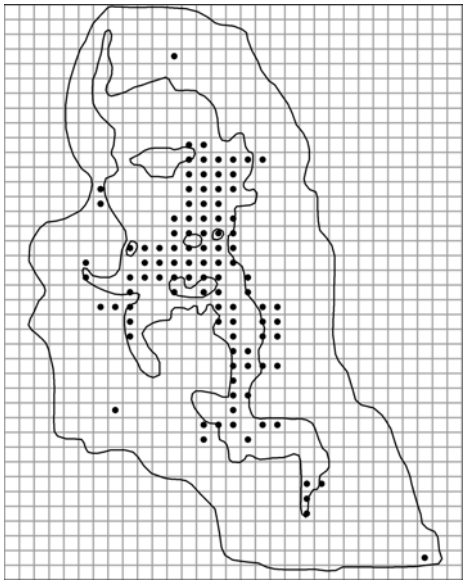

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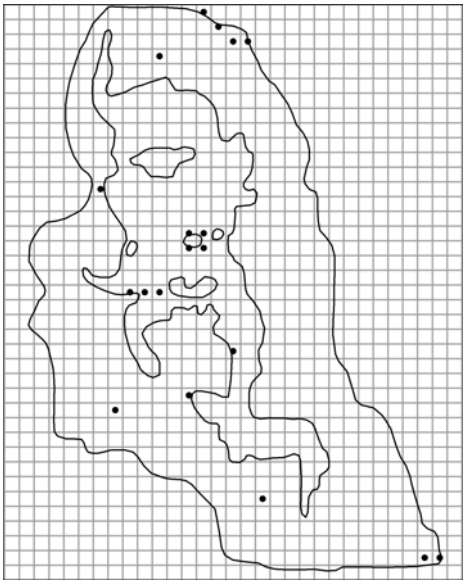

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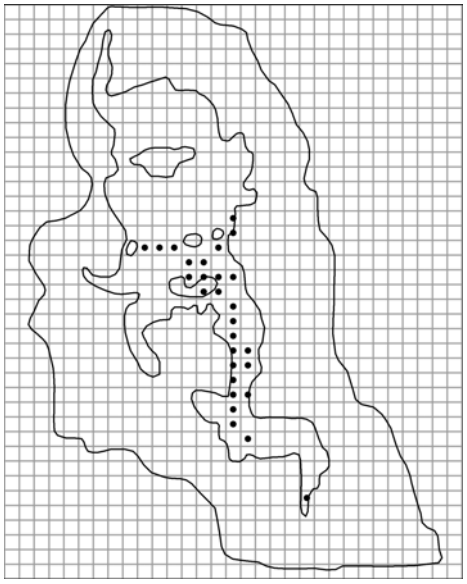

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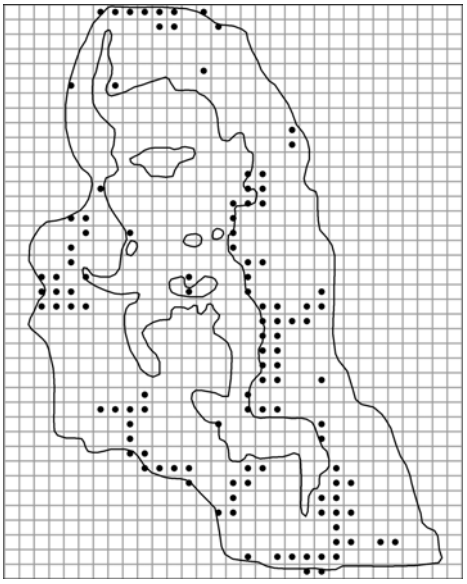

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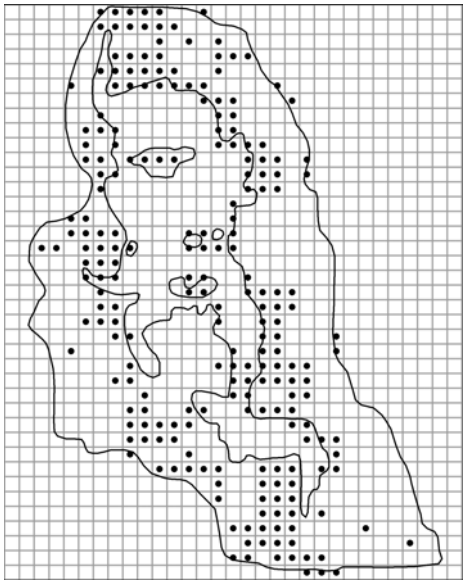

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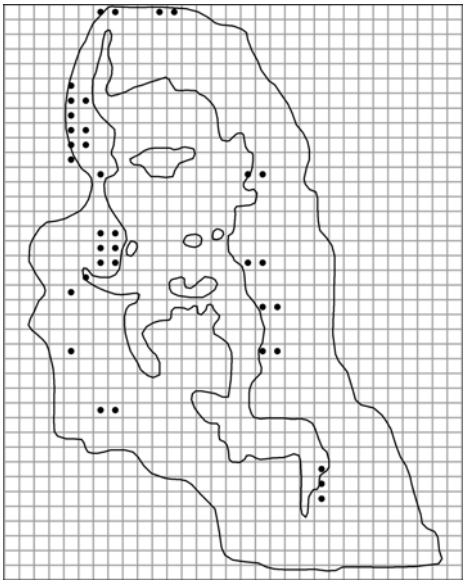

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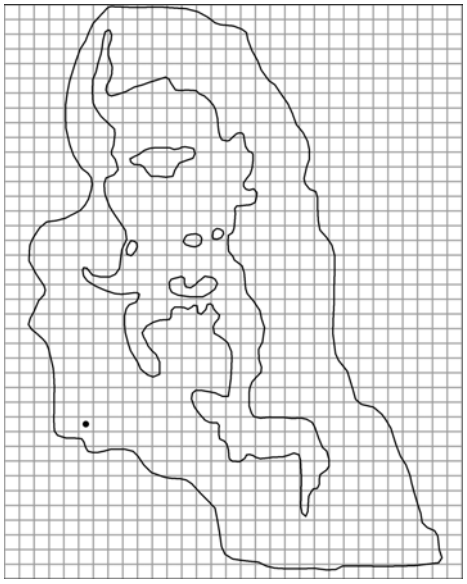

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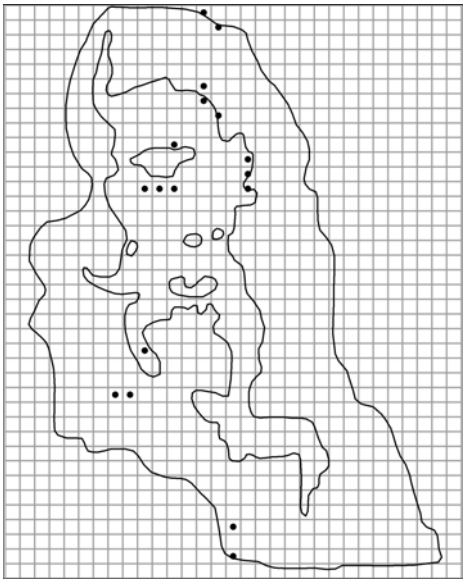

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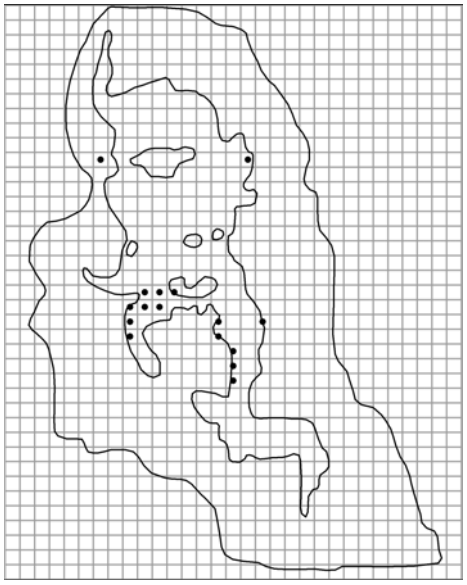

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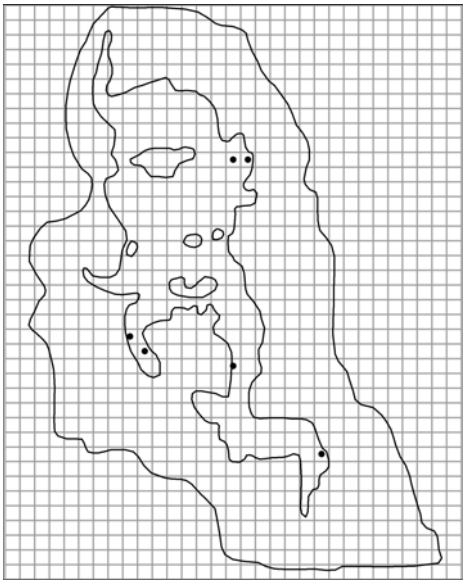

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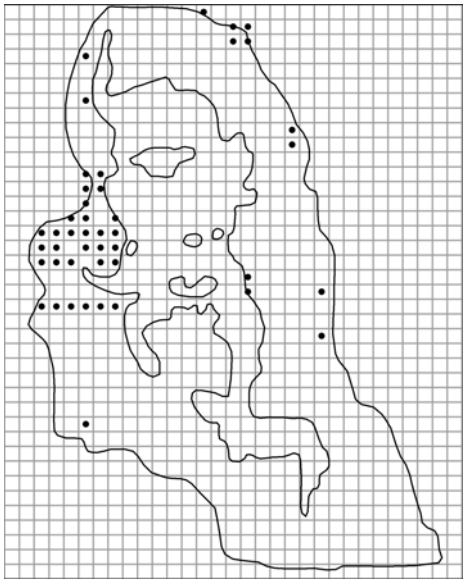

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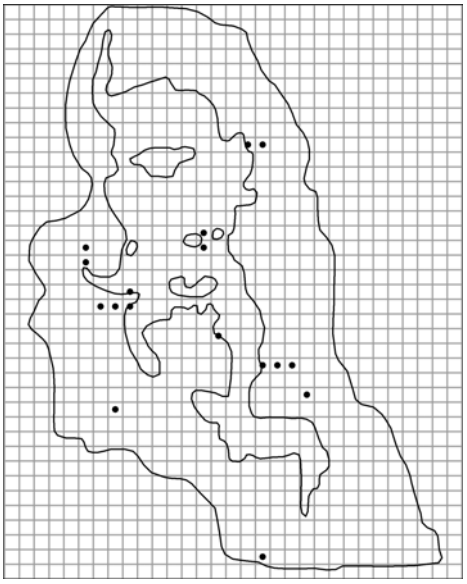
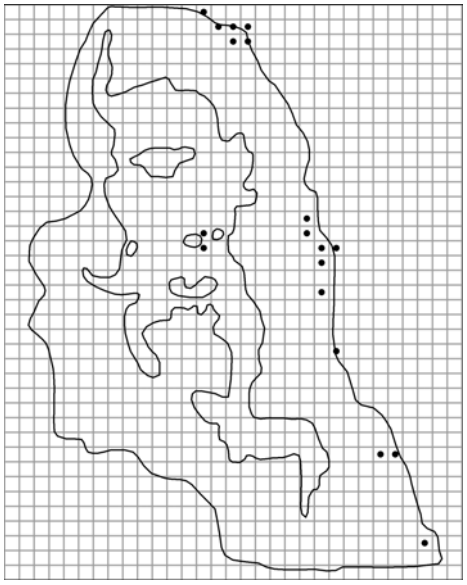


Oenanthe aquatica



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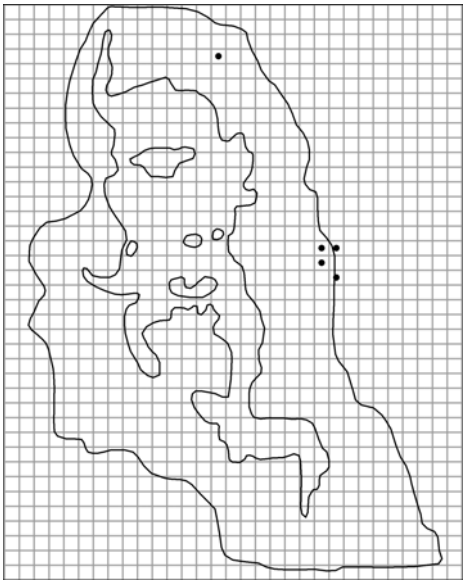

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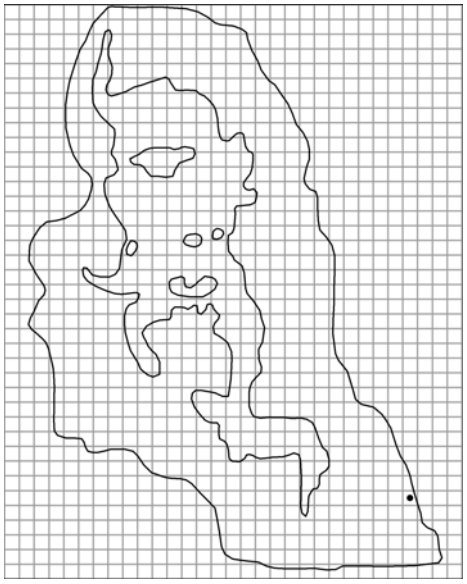

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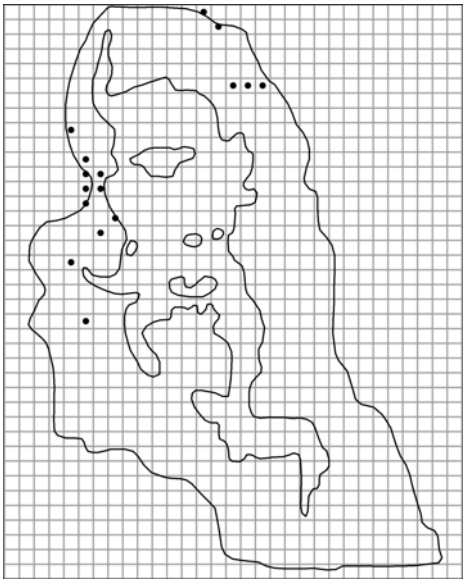
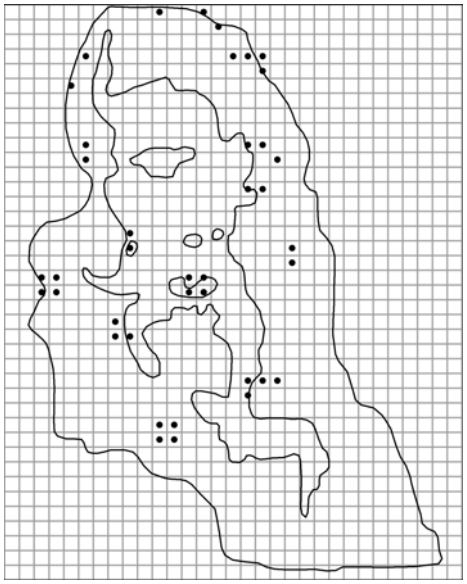
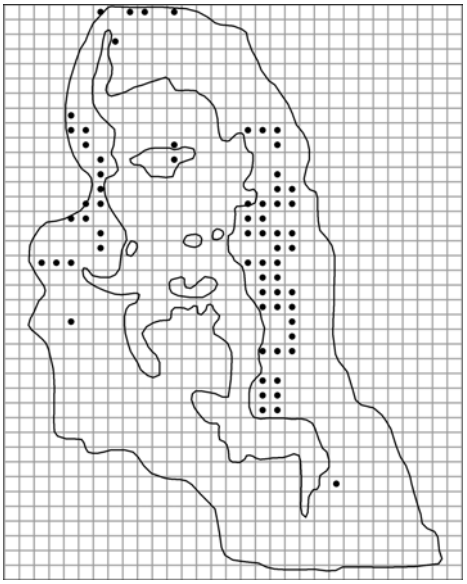


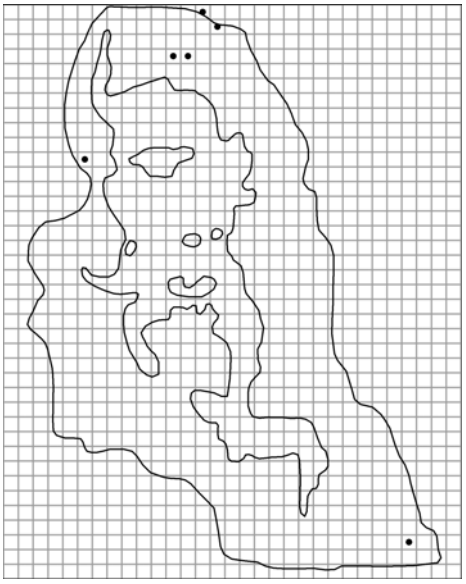
Ononis arvensis



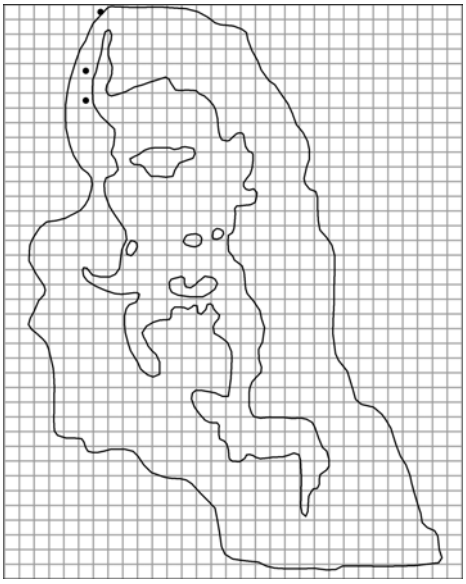
Ophioglossum vulgatum



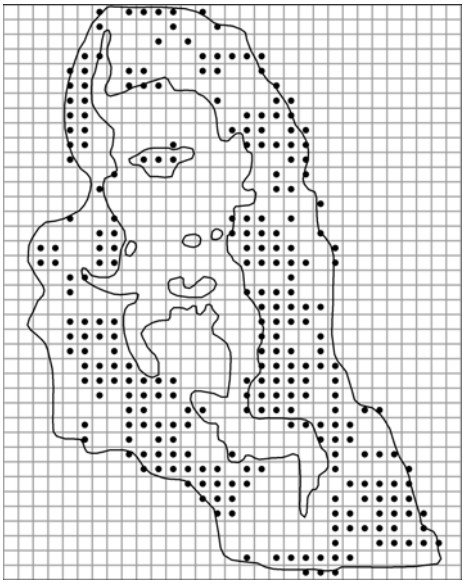
Ophrys insectifera



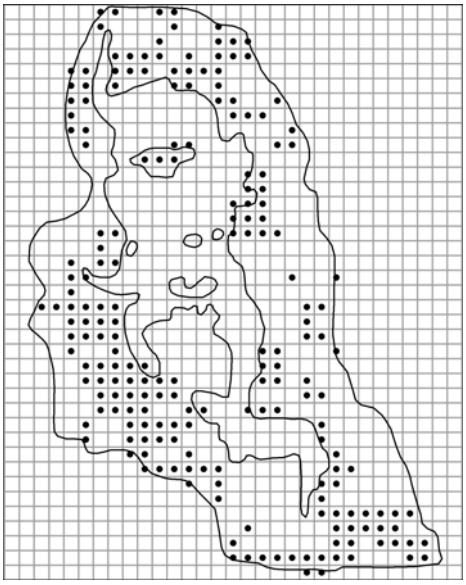
Origanum vulgare



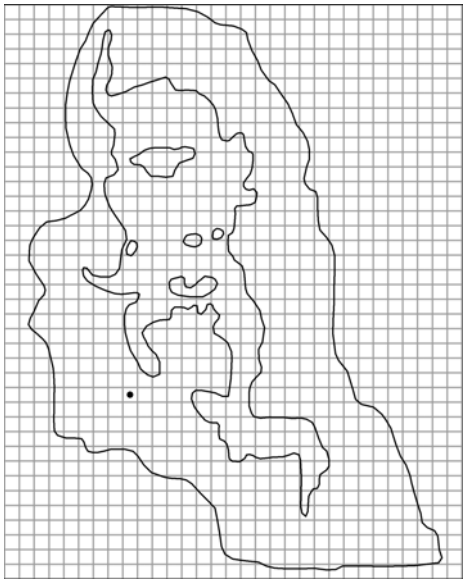
Orobanche pallidiflora



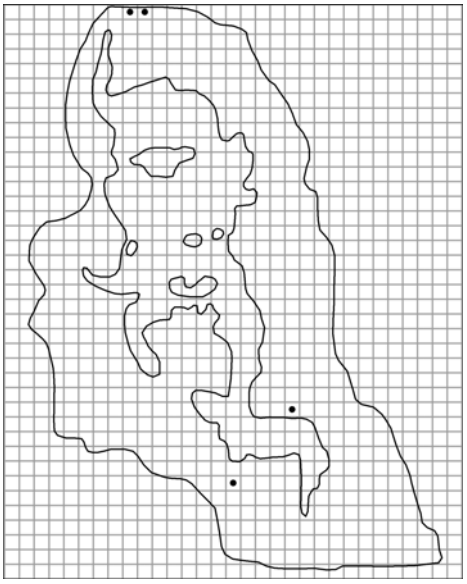
Orthilia secunda



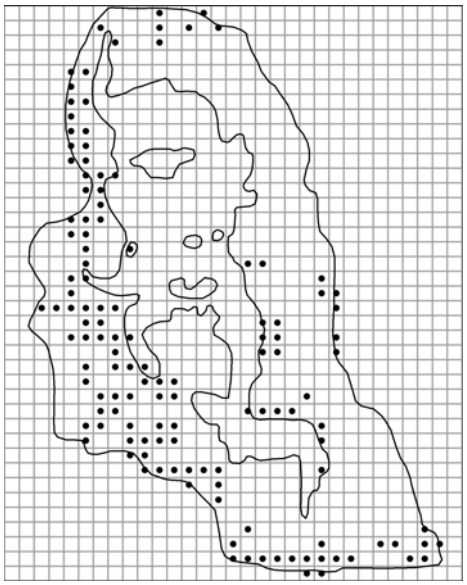
Oxalis acetosella



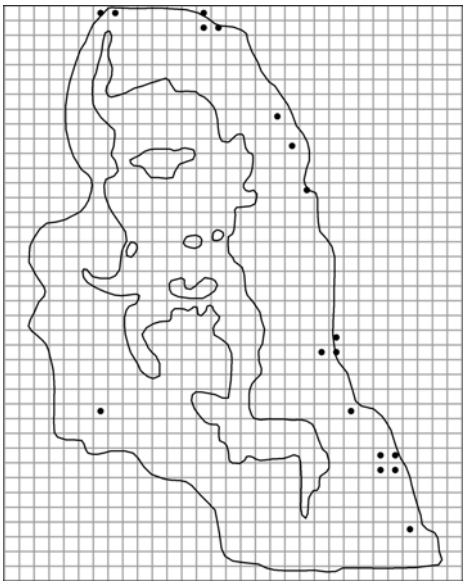
Oxalis stricta



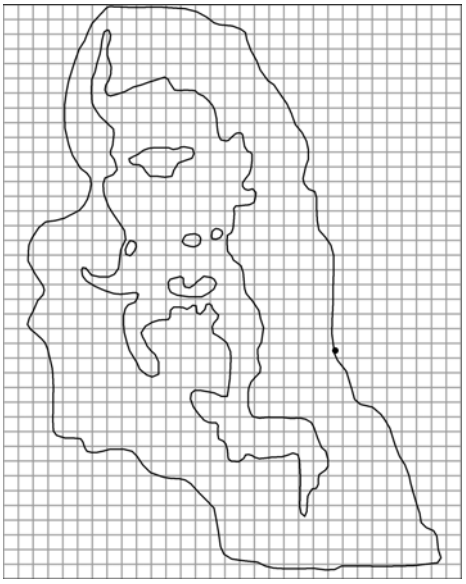
Oxycoccus palustris



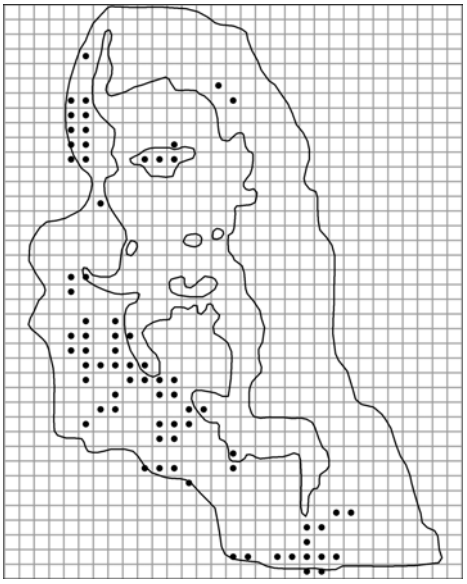
Padus avium



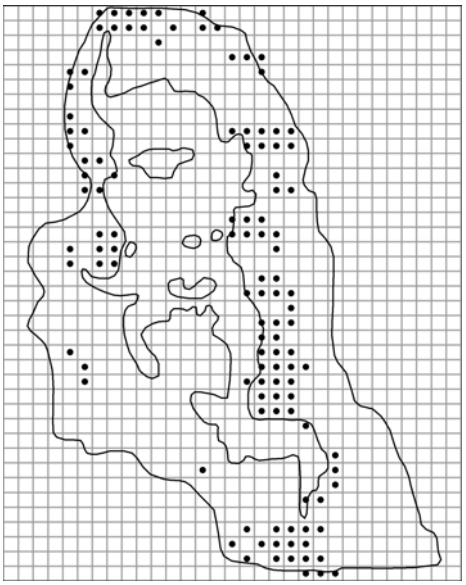
Papaver dubium



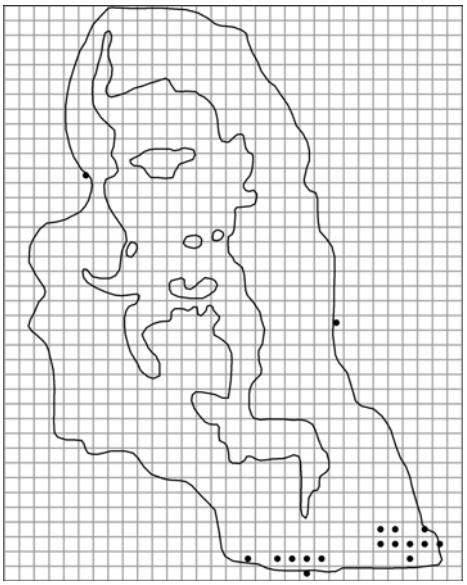
Papaver rhoeas



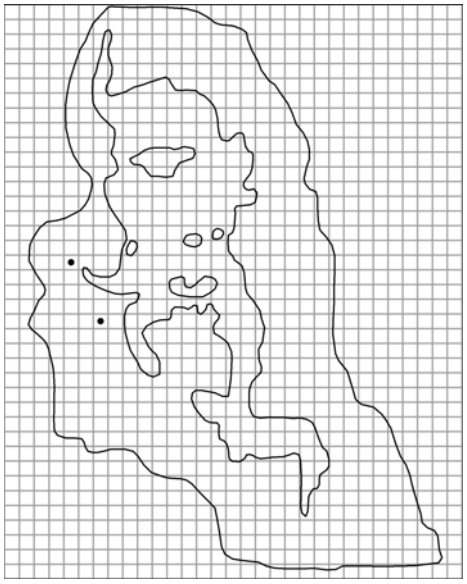
Paris quadrifolia



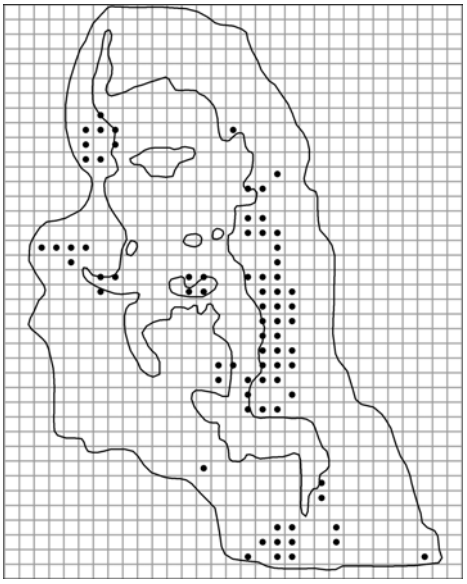
Parnassia palustris



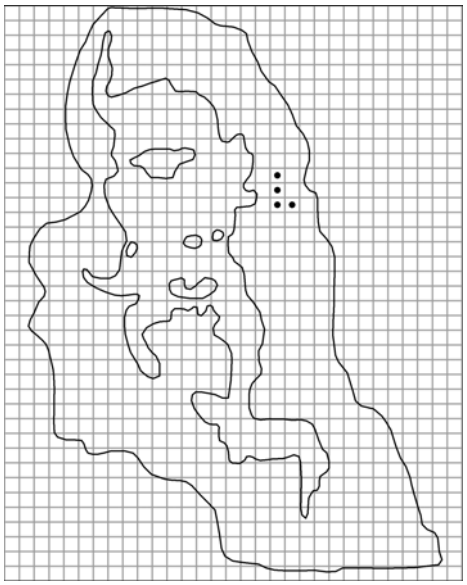
Pastinaca sativa



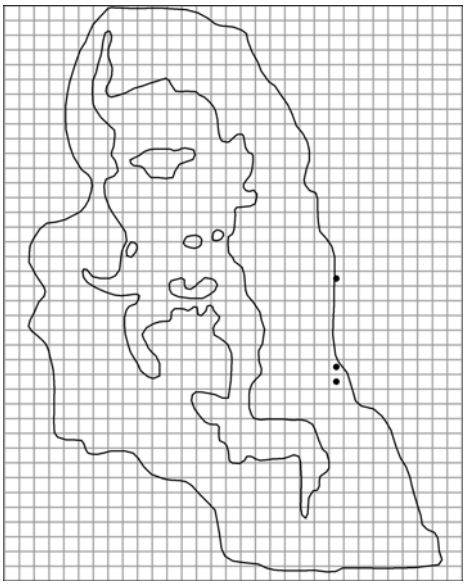
Pedicularis palustris subsp. opsiantha



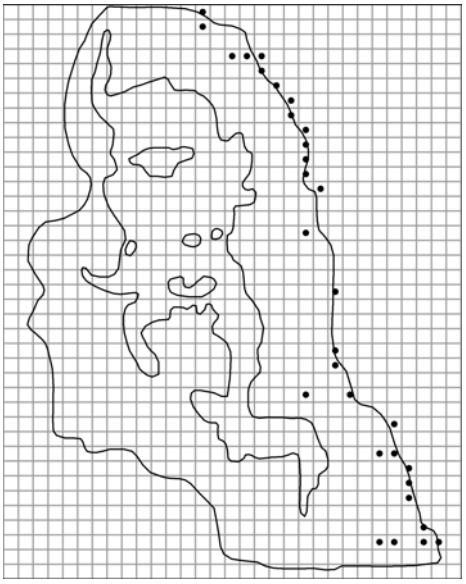
Pedicularis palustris subsp. palustris



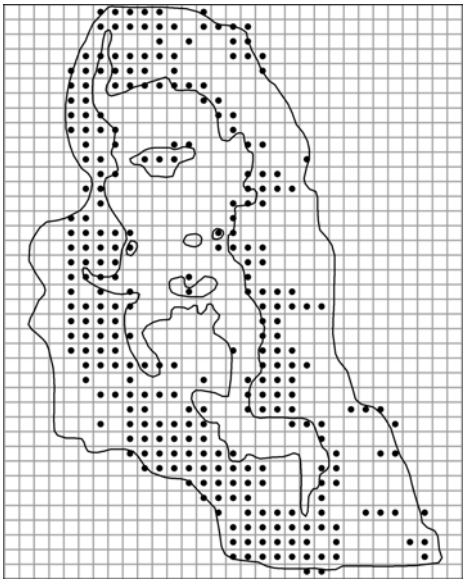
Pedicularis sceptrum-carolinum



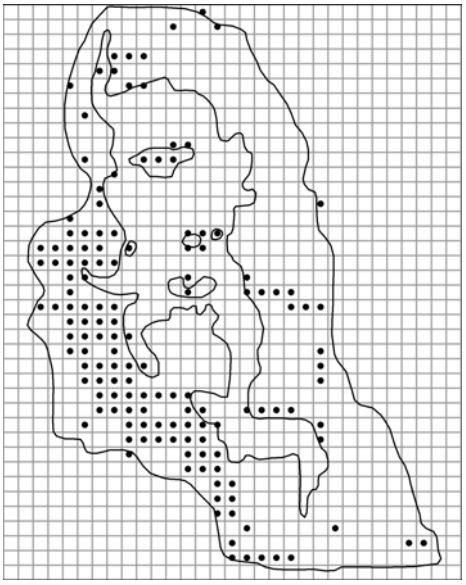
Petasites spurius



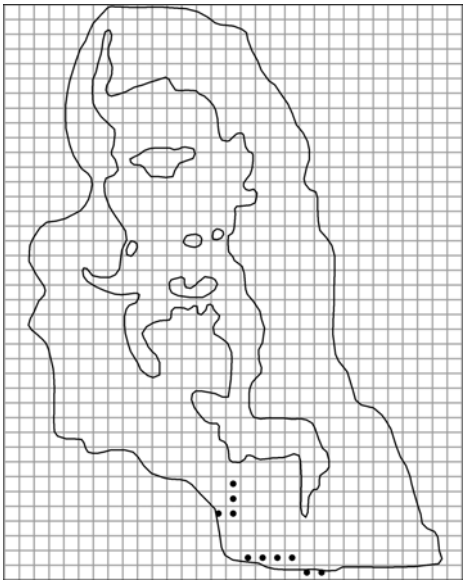
Peucedanum oreoselinum



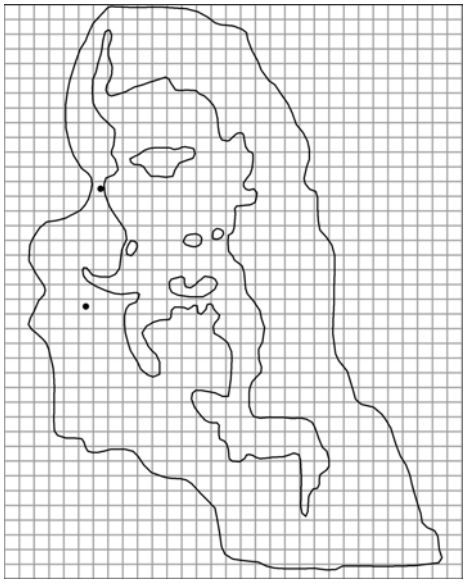
Peucedanum palustre



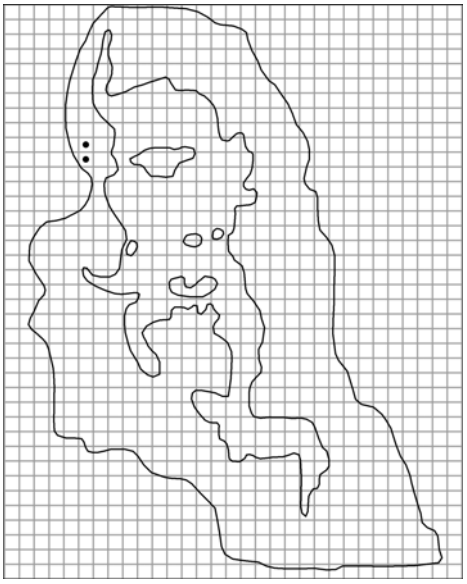
Phalaroides arundinacea



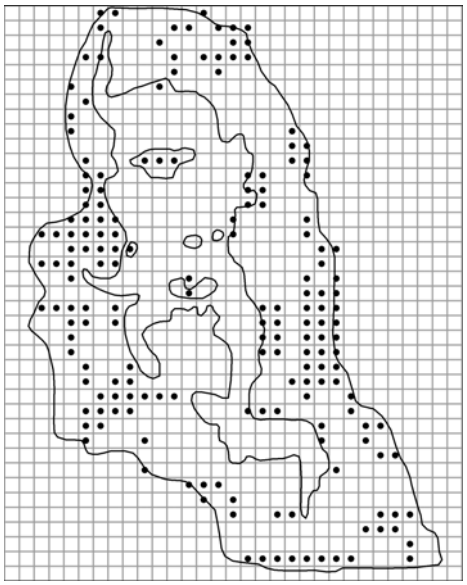
Phegopteris connectilis



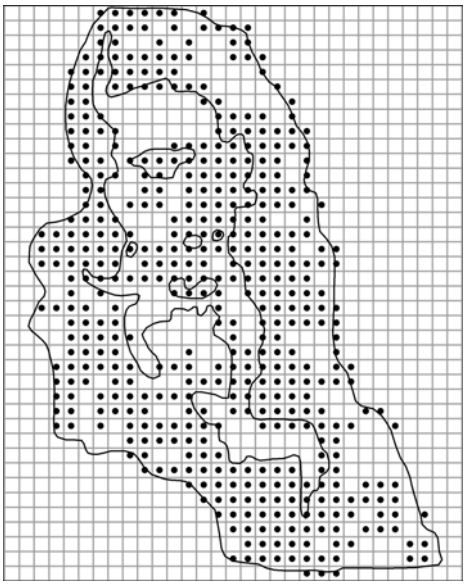
Phleum nodosum



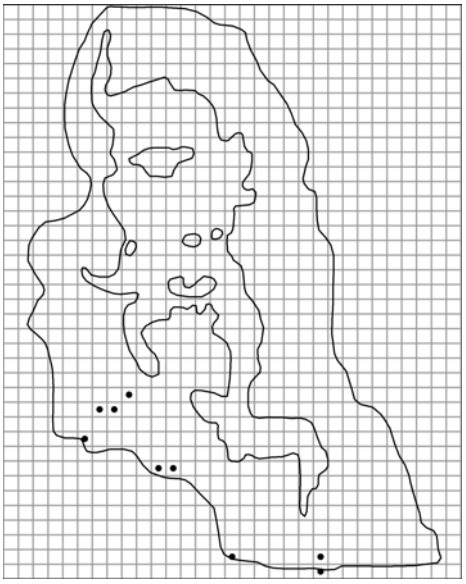
Phleum phleoides



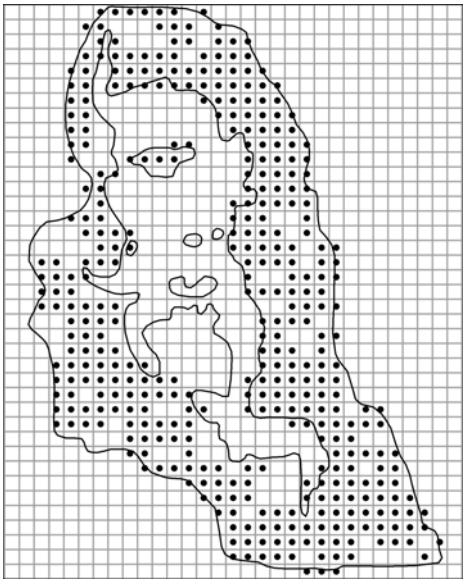
Phleum pratense



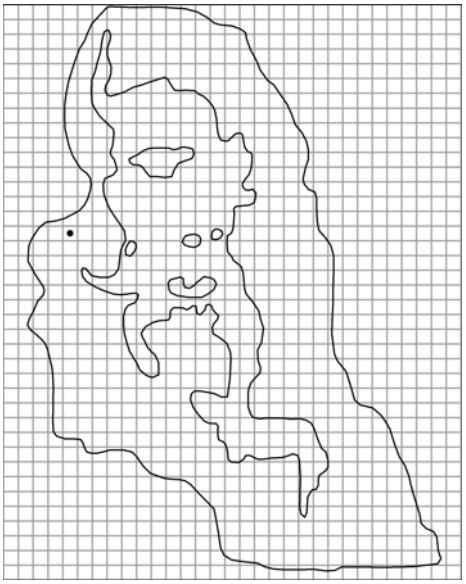
Phragmites australis



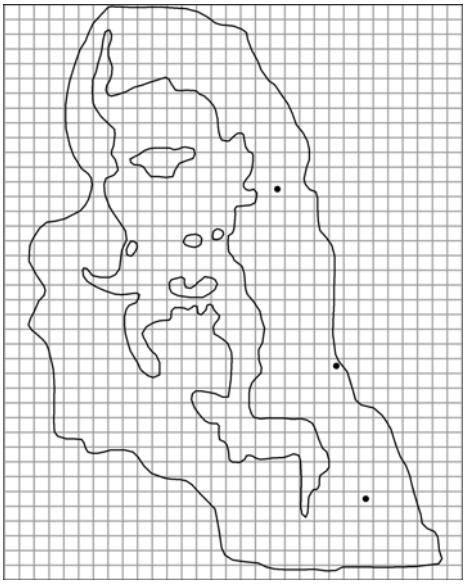
Phyteuma spicatum



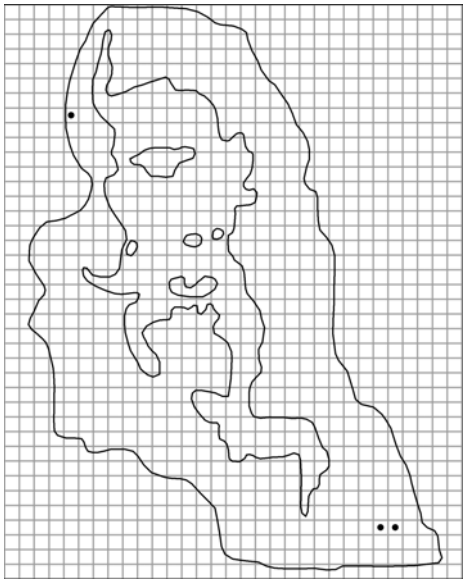
Picea abies



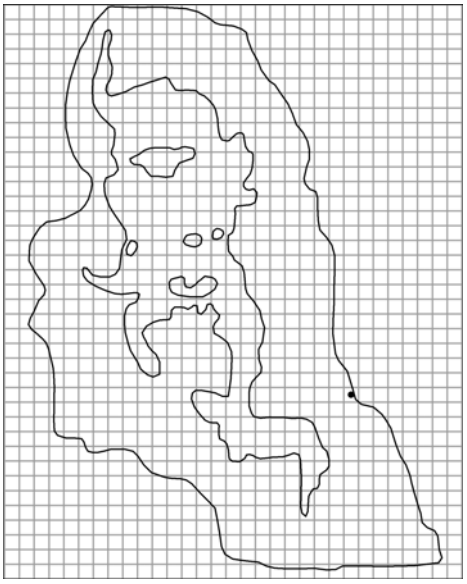
Picris hieracioides



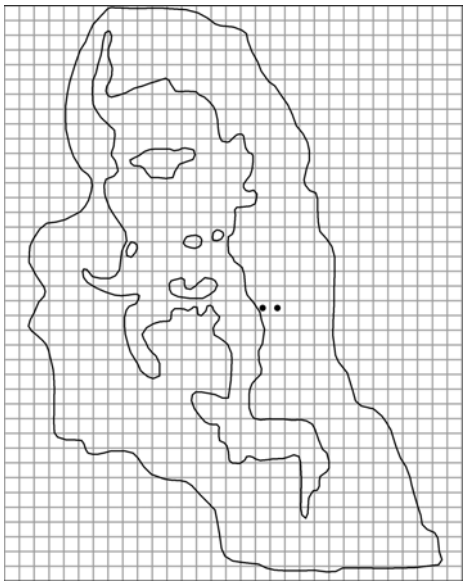
Pilosella bauhinii



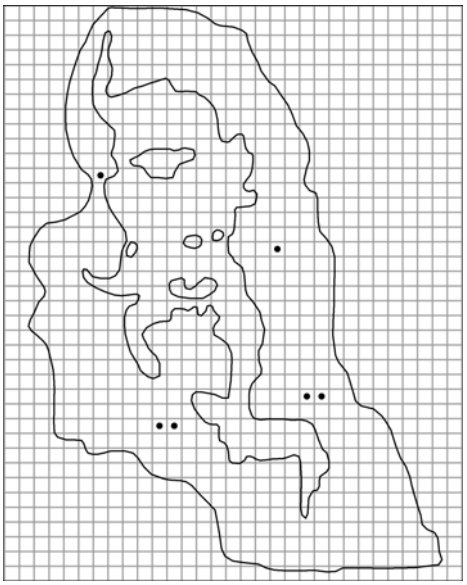
Pilosella caespitosa



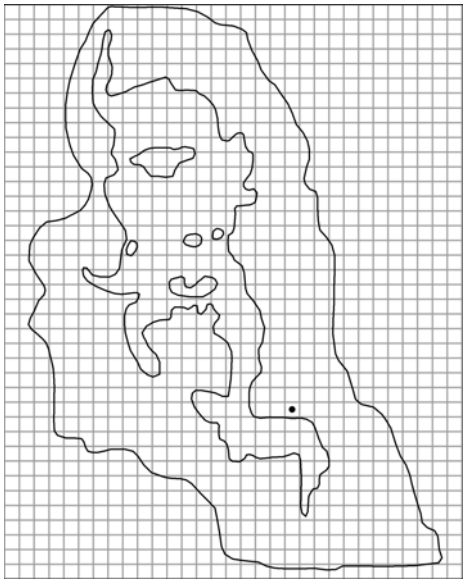
Pilosella cymosa



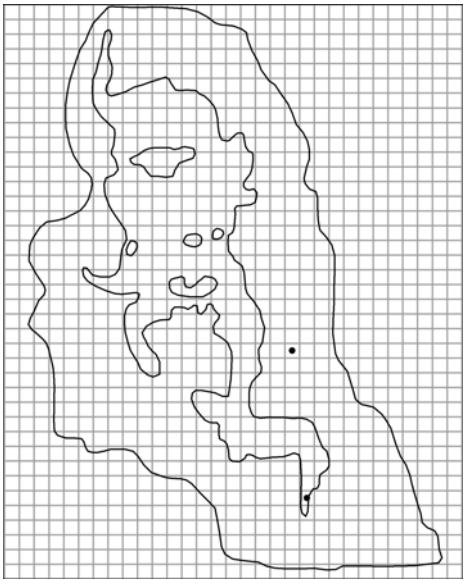
Pilosella × flagellaris



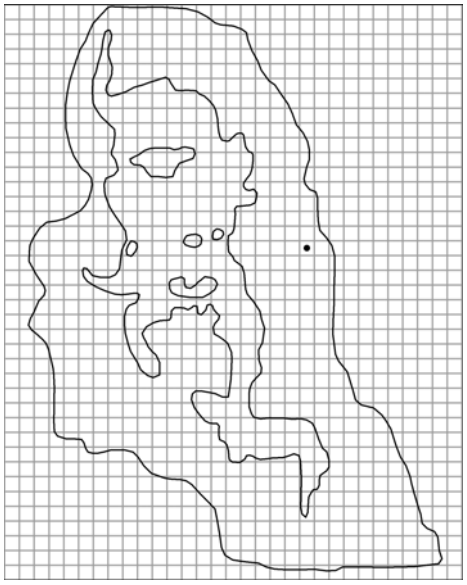
Pilosella × floribunda



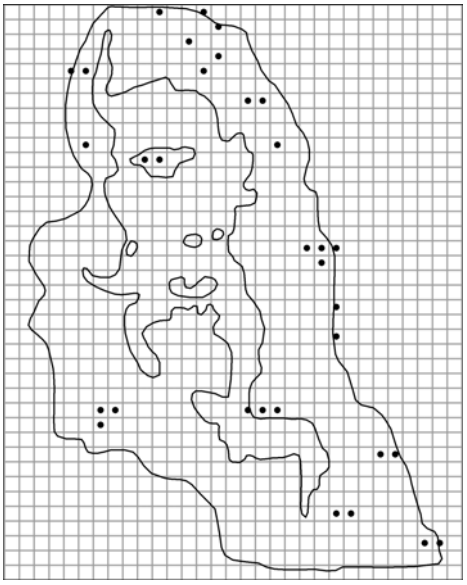
Pilosella × glomerata



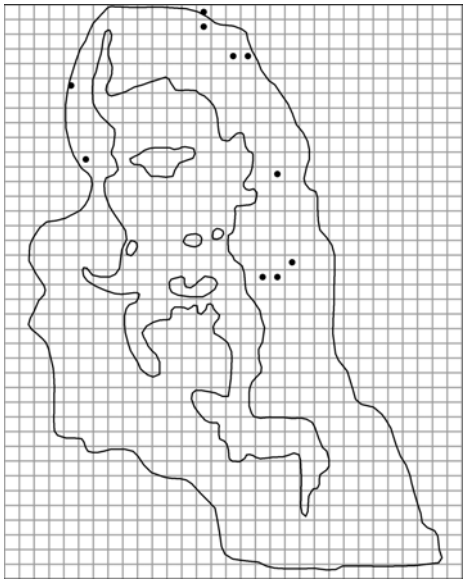
Pilosella lactucella



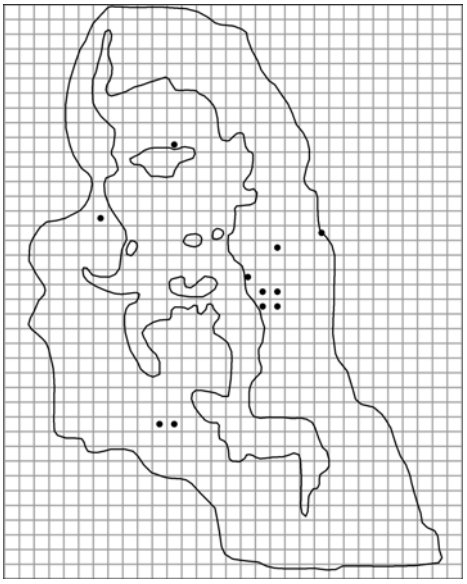
Pilosella × lobarzewskii



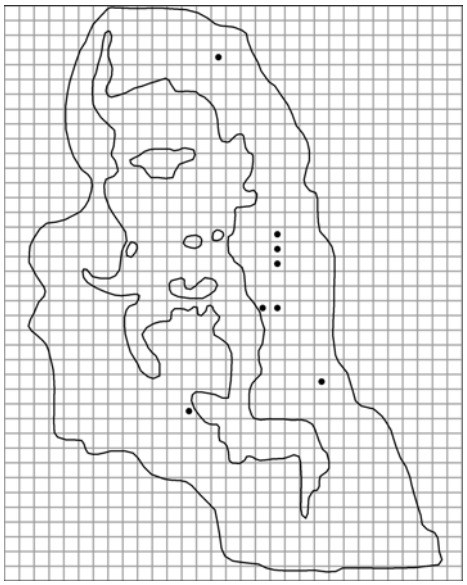
Pilosella officinarum



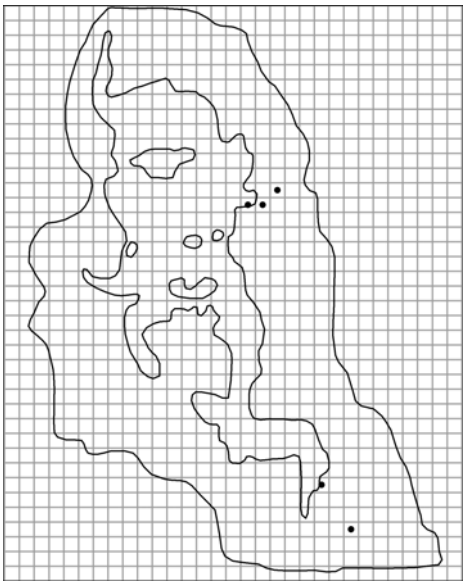
Pilosella × polimastix



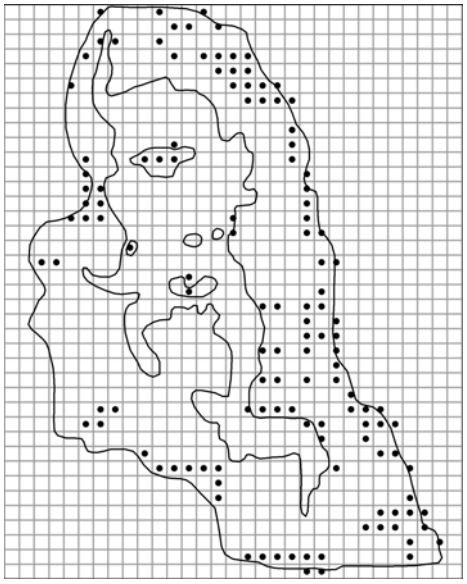
Pilosella praealta



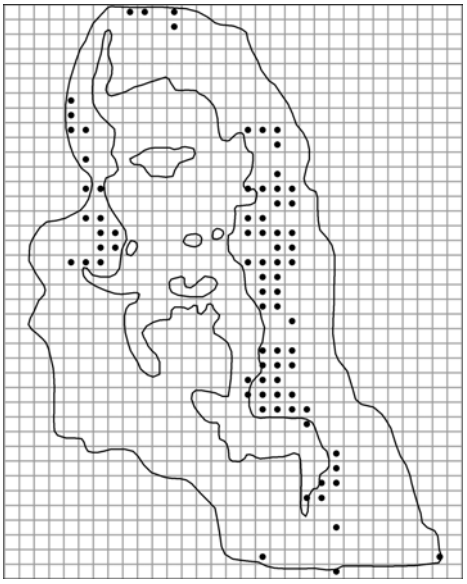
Pilosella × progenita



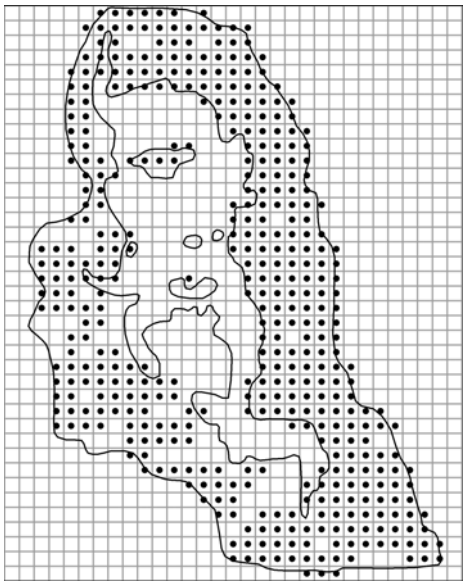
Pilosella × suecica



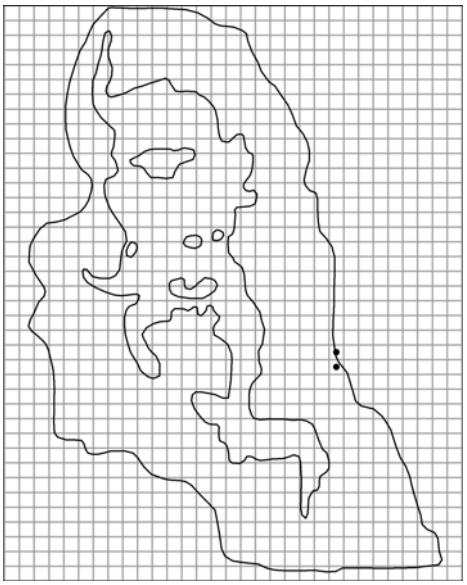
Pimpinella saxifraga



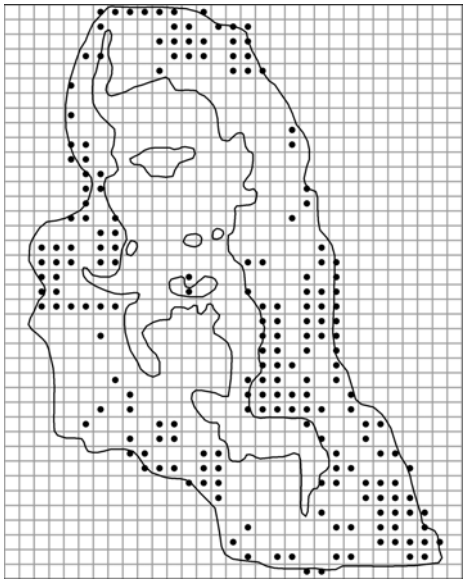
Pinguicula vulgaris



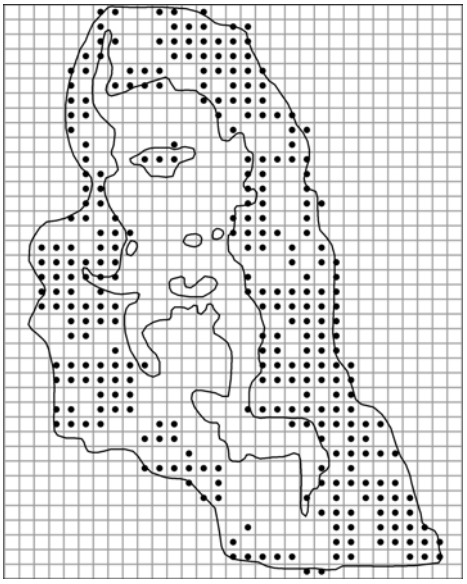
Pinus sylvestris



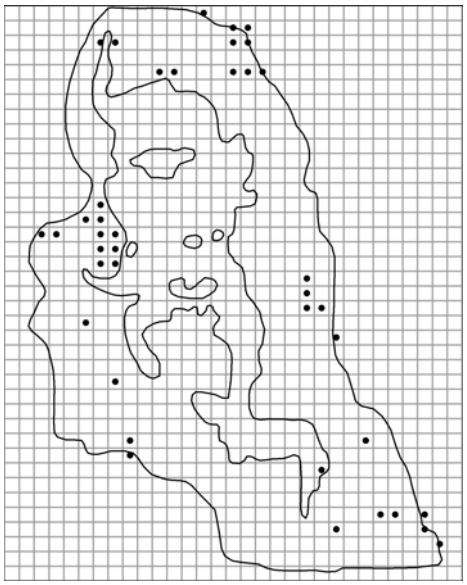
Plantago intermedia



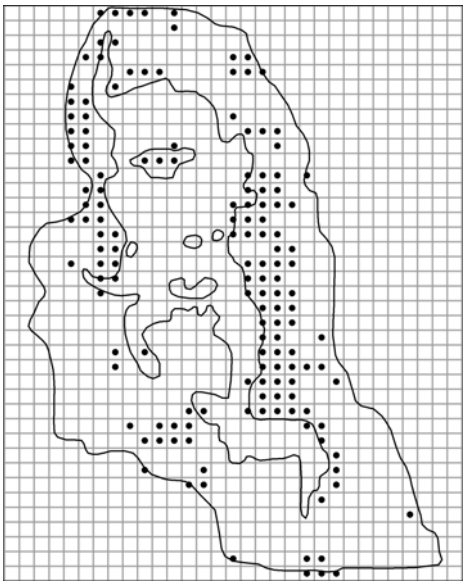
Plantago lanceolata



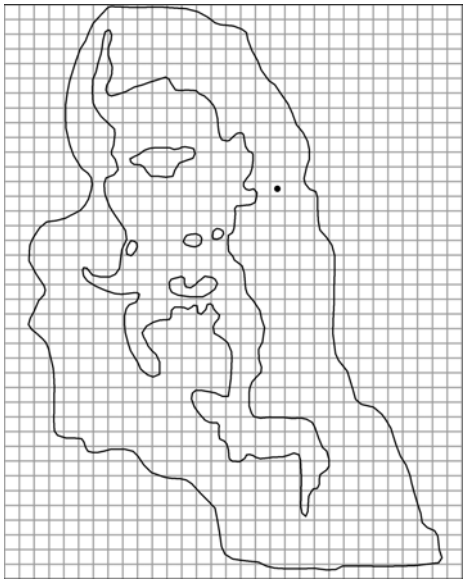
Plantago major



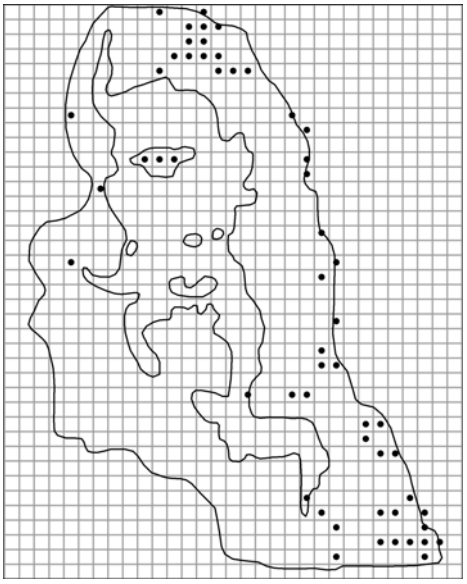
Plantago media



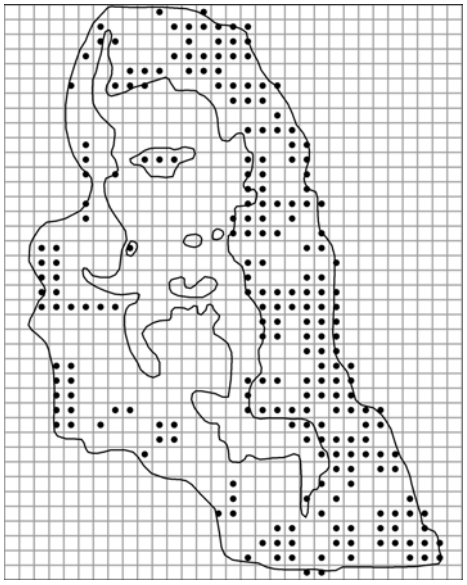
Platanthera bifolia



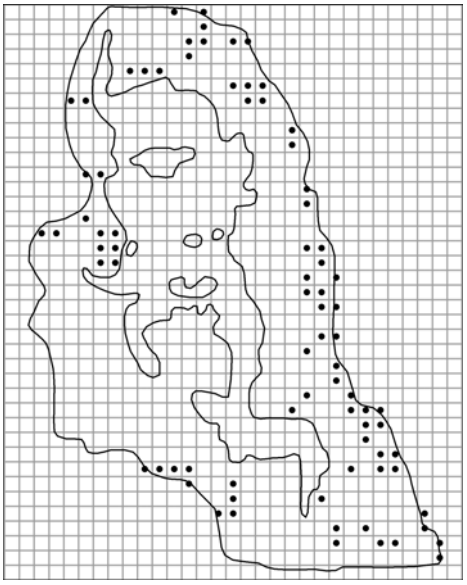
Platanthera chlorantha



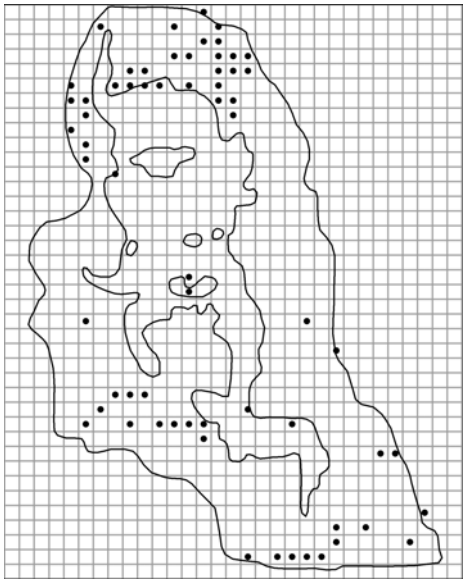
Poa angustifolia



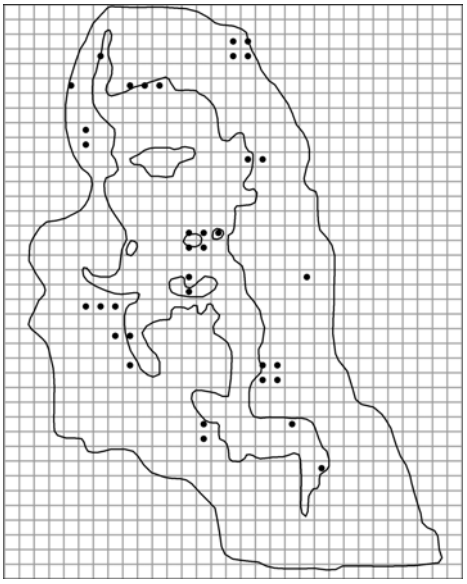
Poa annua



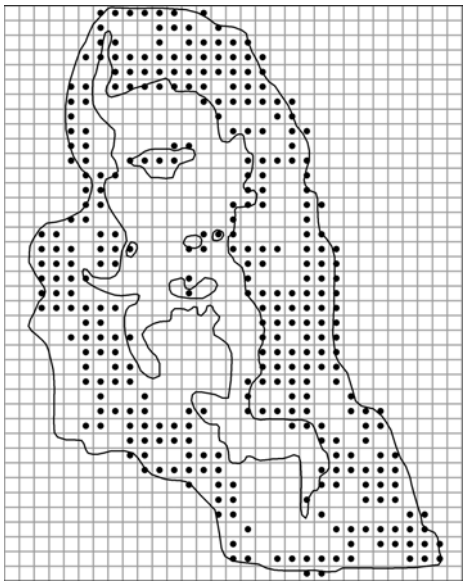
Poa compressa



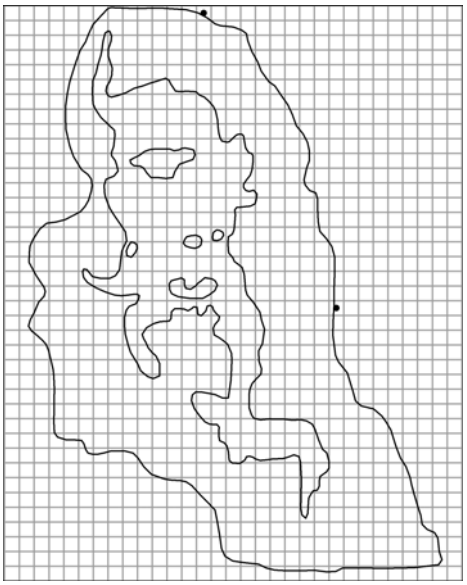
Poa nemoralis



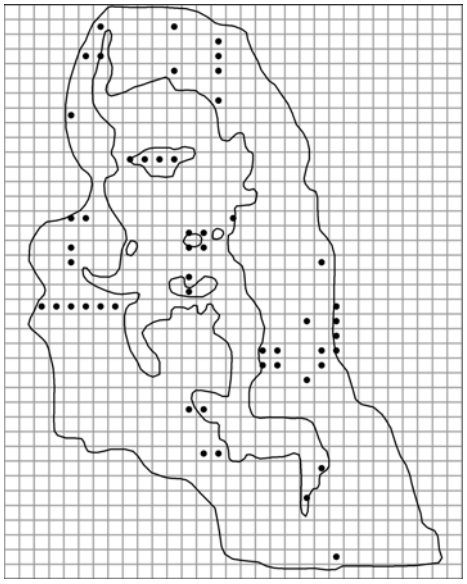
Poa palustris



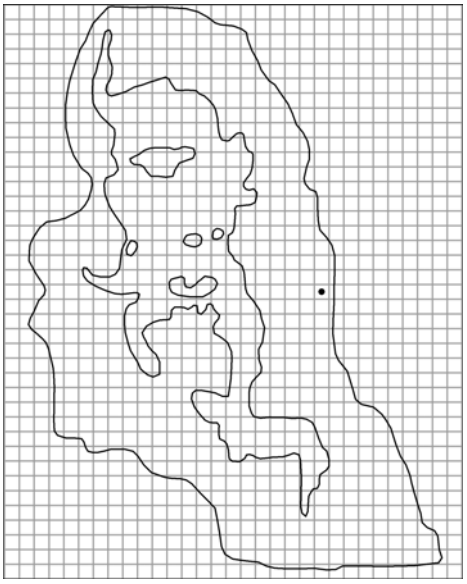
Poa pratensis



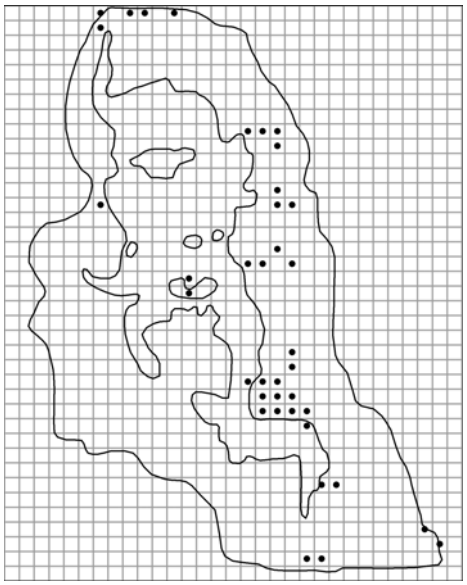
Poa subcaerulea



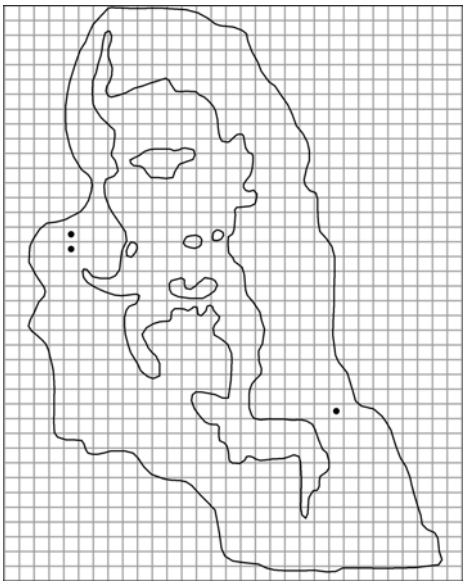
Poa trivialis



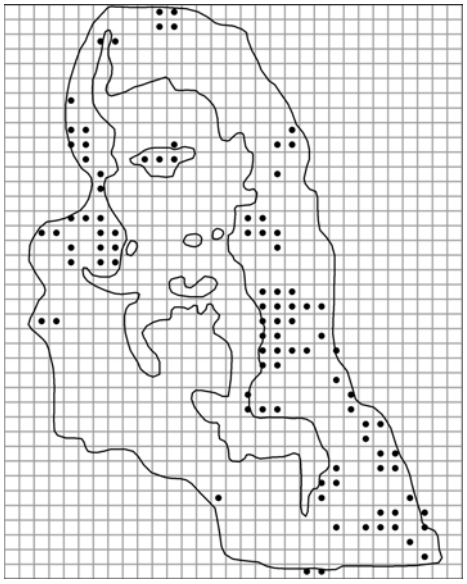
Polemonium caeruleum



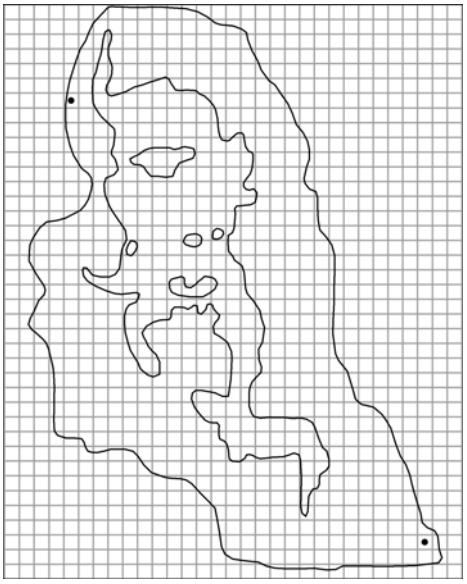
Polygala amarella



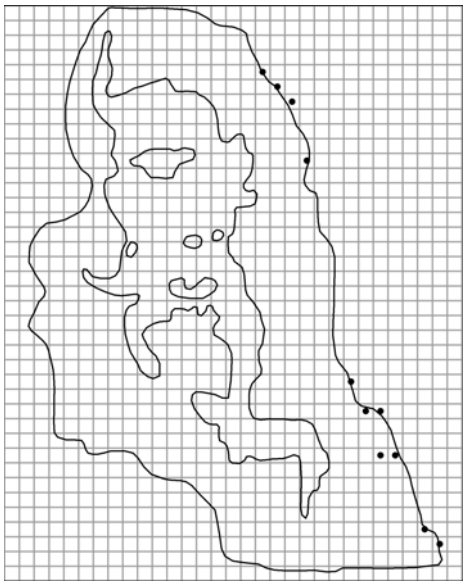
Polygala comosa



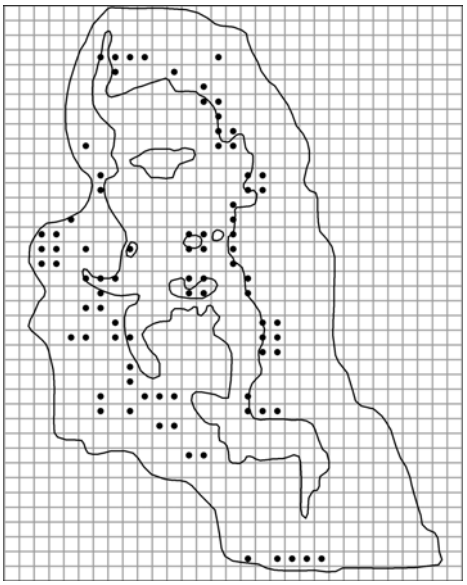
Polygala vulgaris



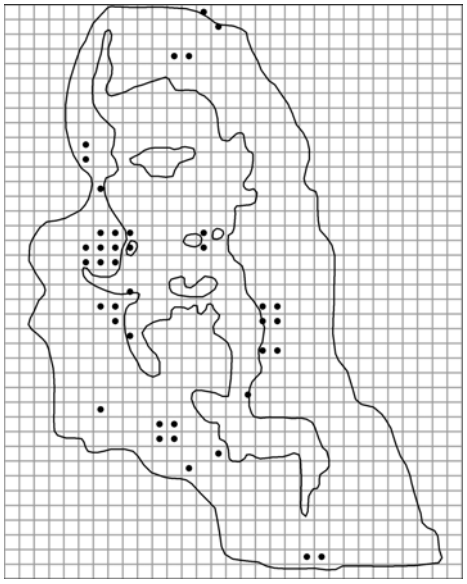
Polygonatum multiflorum



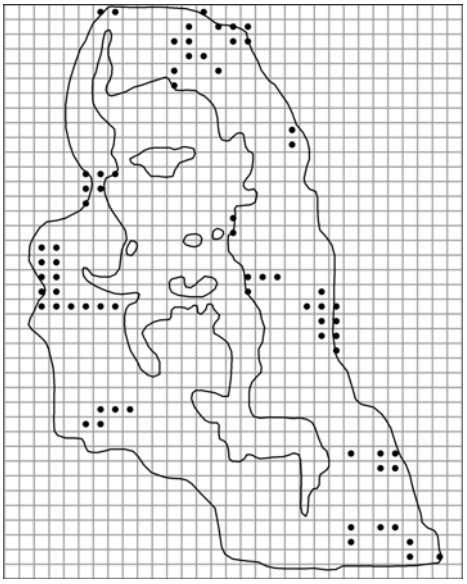
Polygonatum odoratum



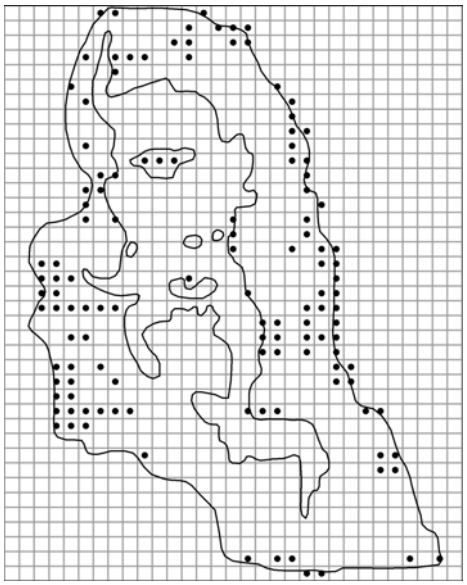
Polygonum amphibium var. aquaticum



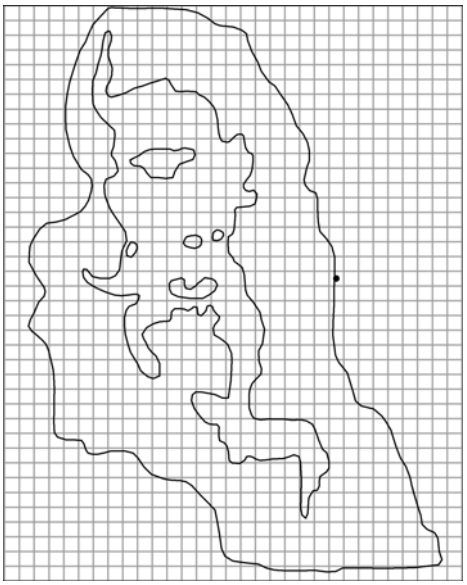
Polygonum amphibium var. terrestre



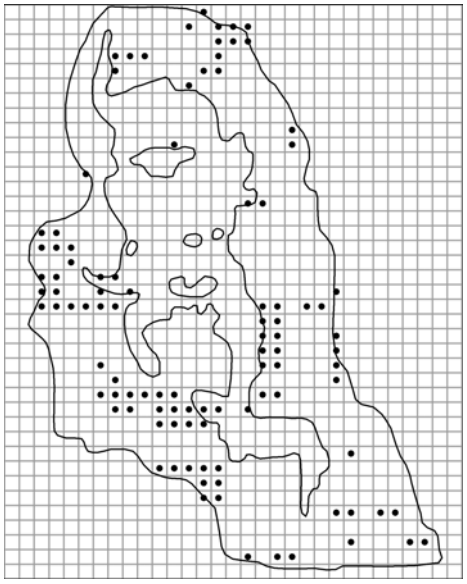
Polygonum arenastrum



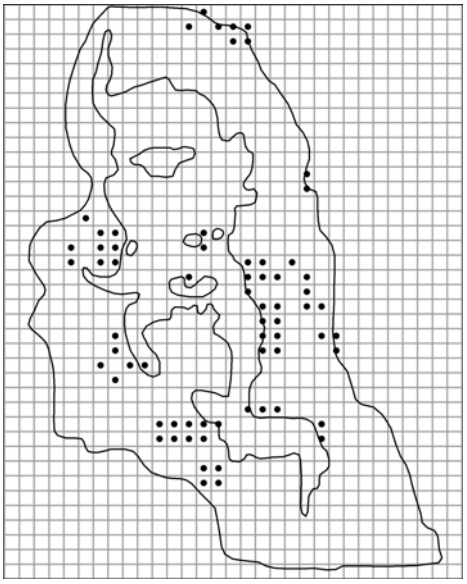
Polygonum aviculare



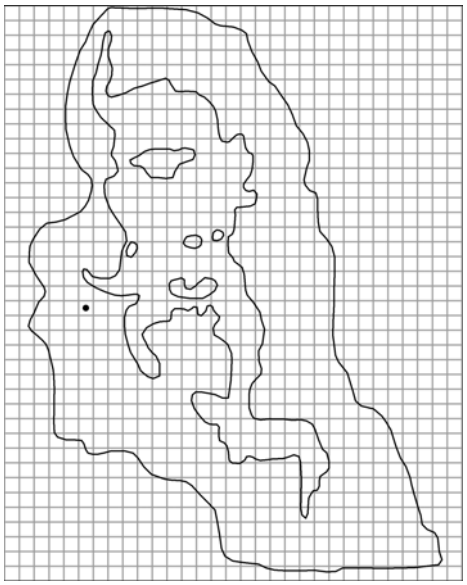
Polygonum bistorta



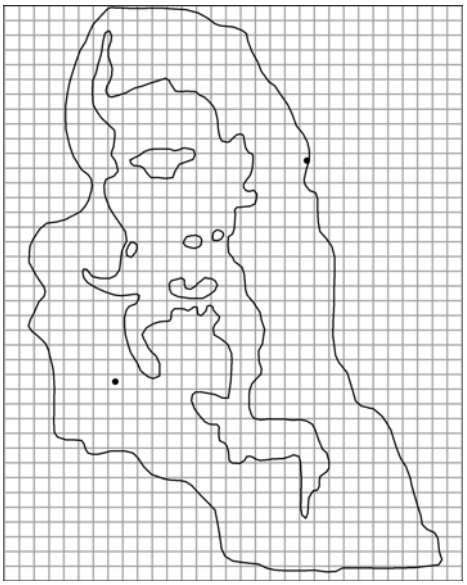
Polygonum hydropiper



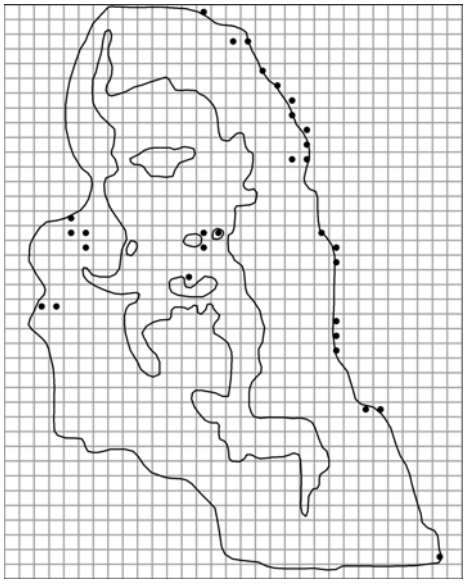
Polygonum minus



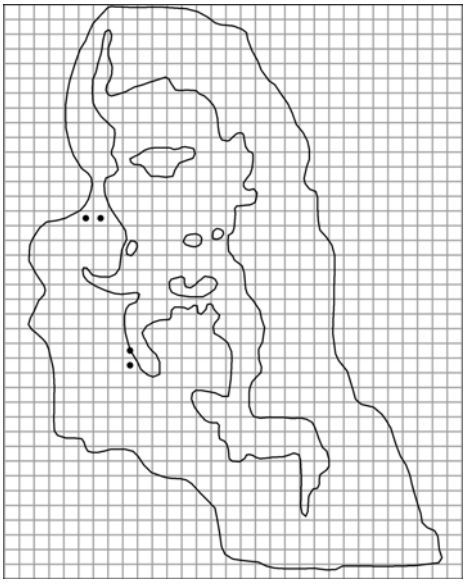
Polygonum mite



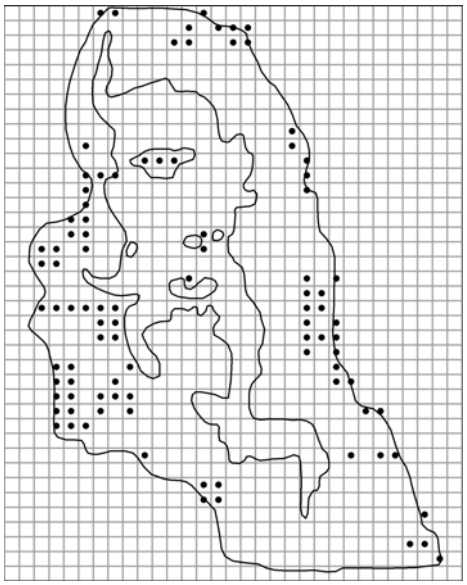
Polygonum neglectum



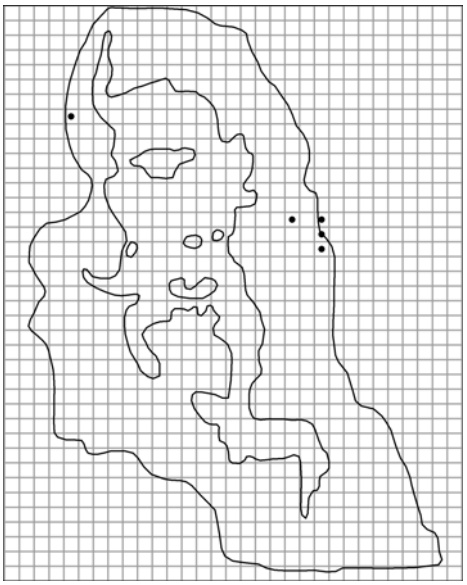
Polygonum nodosum



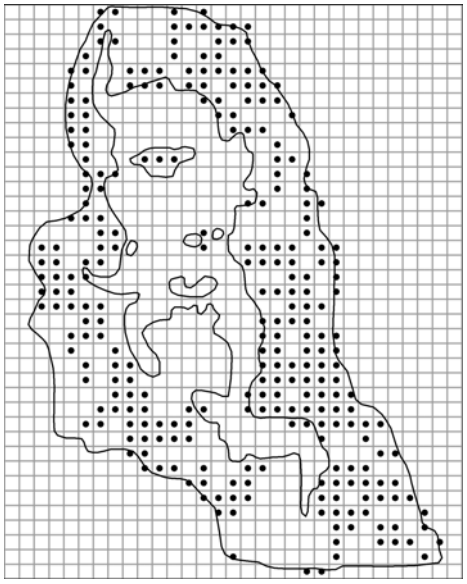
Polygonum persicaria



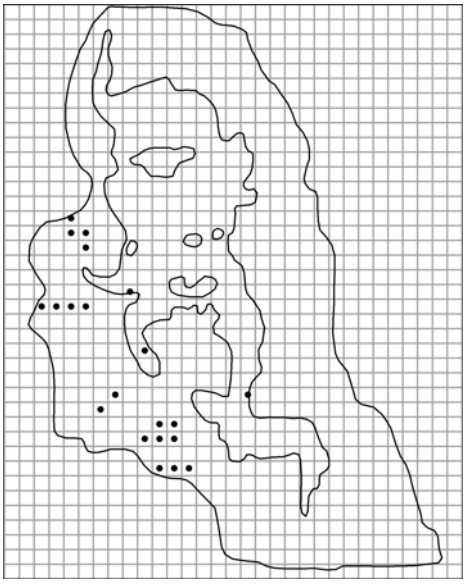
Polygonum scabrum



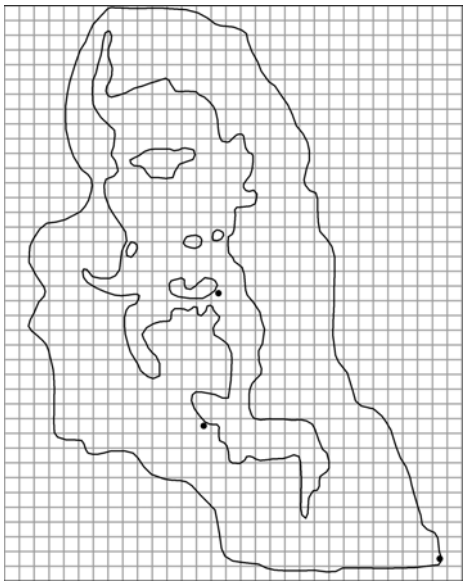
Polypodium vulgare



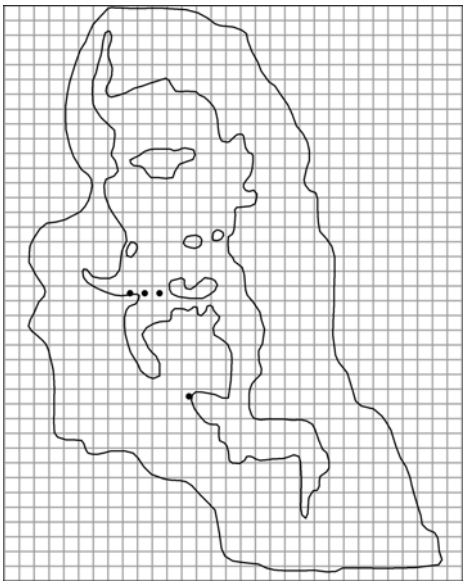
Populus tremula



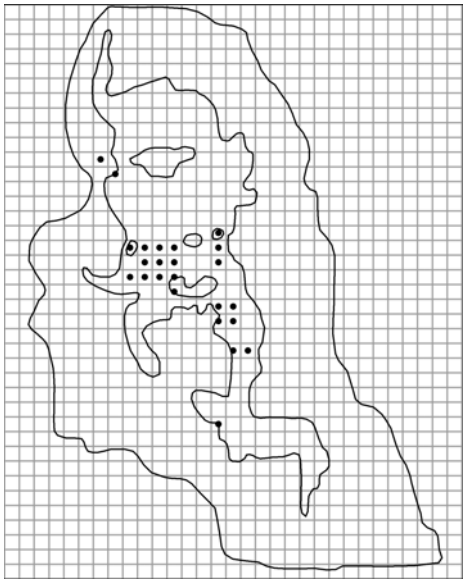
Potamogeton alpinus



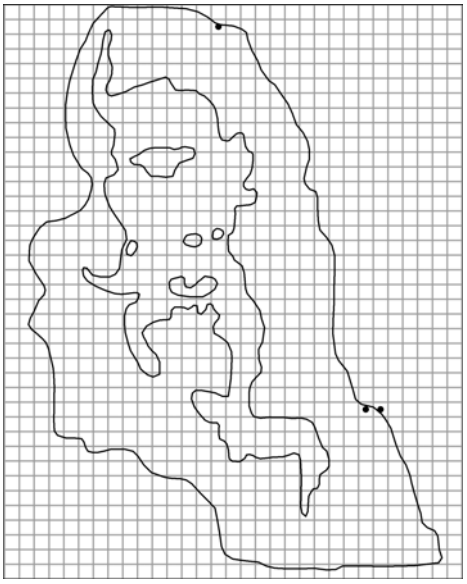
Potamogeton berchtoldii



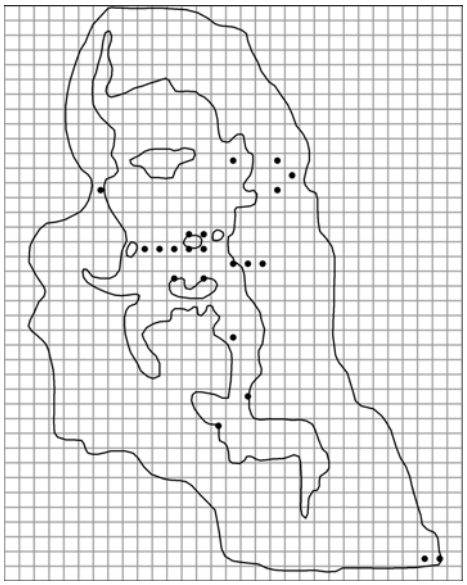
Potamogeton compressus



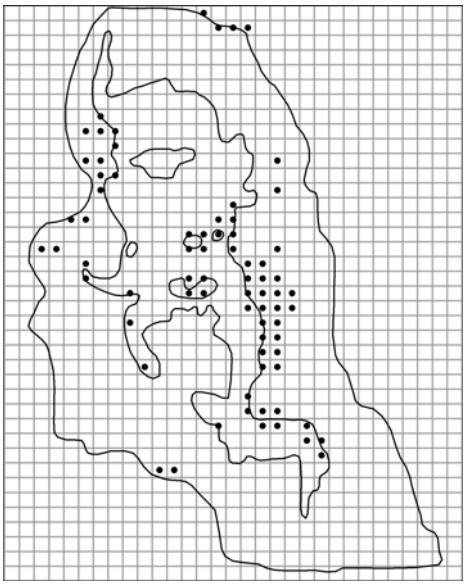
Potamogeton crispus



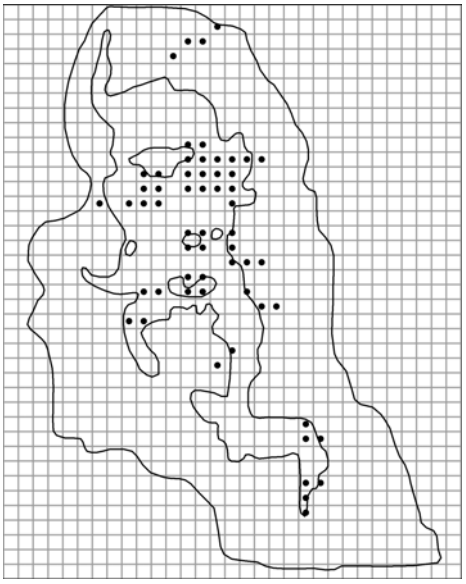
Potamogeton filiformis



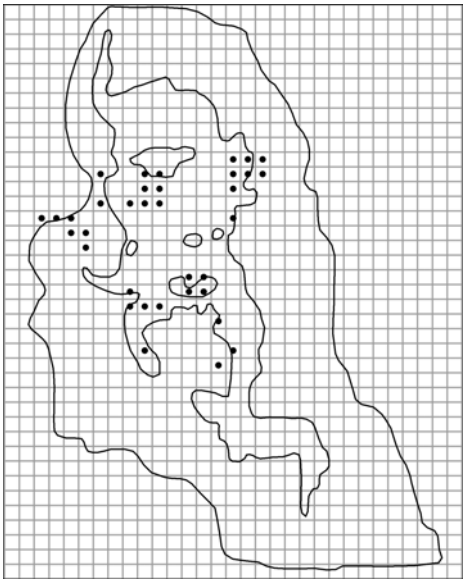
Potamogeton friesii



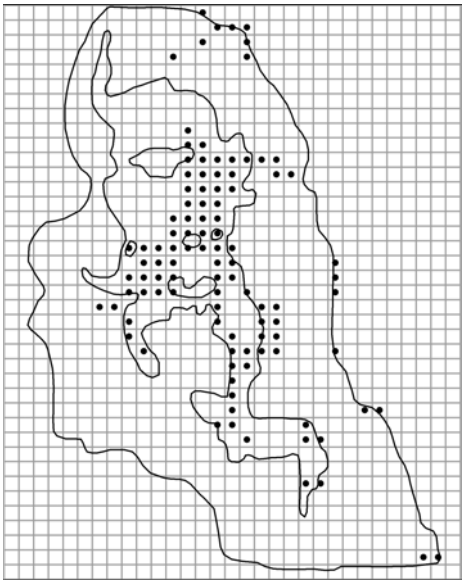
Potamogeton gramineus



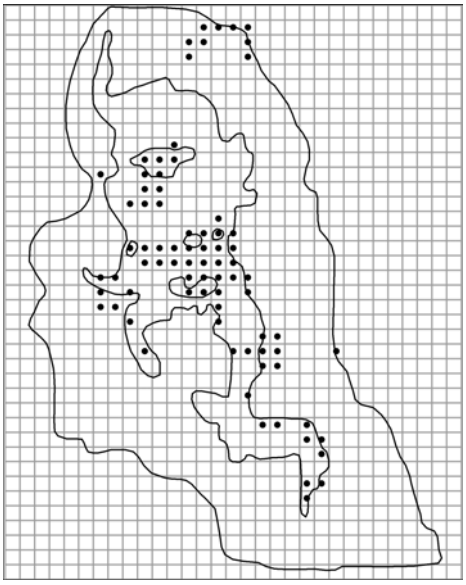
Potamogeton lucens



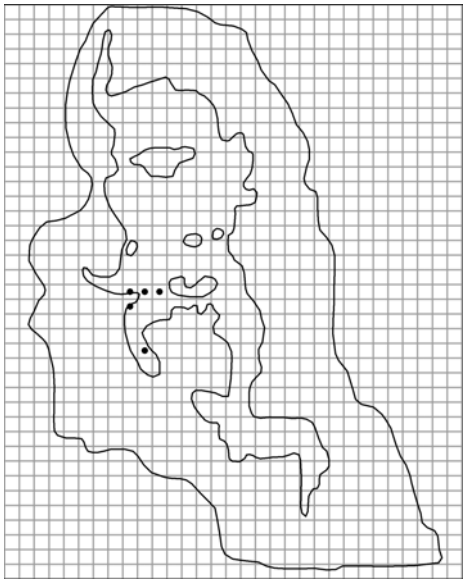
Potamogeton natans



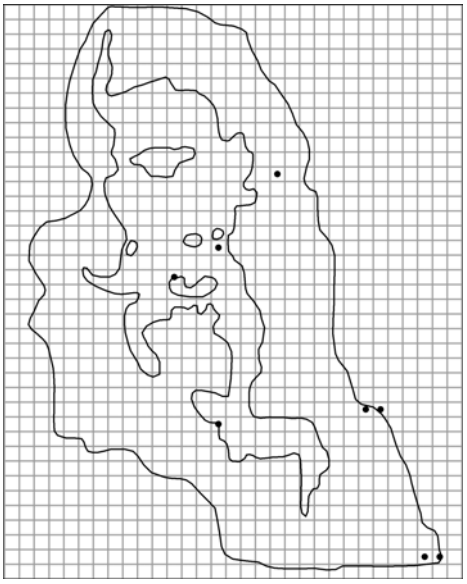
Potamogeton pectinatus



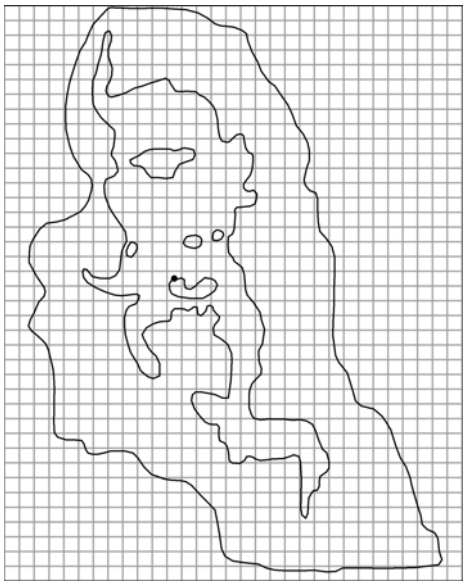
Potamogeton perfoliatus



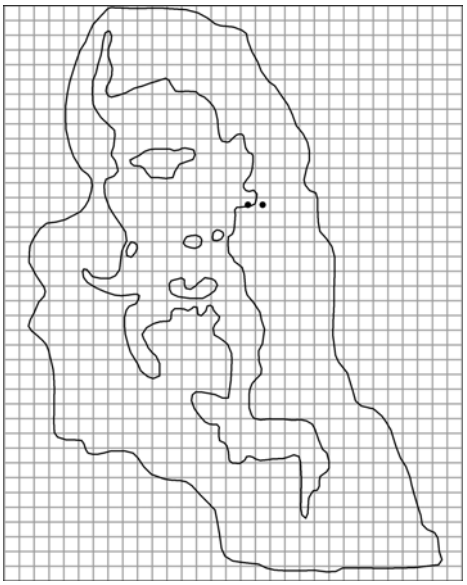
Potamogeton praelongus



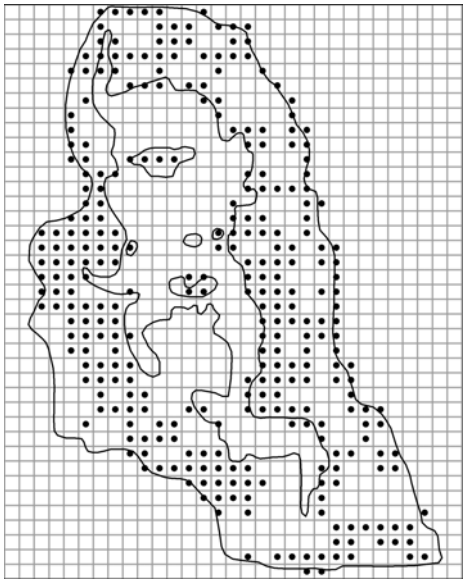
Potamogeton pusillus



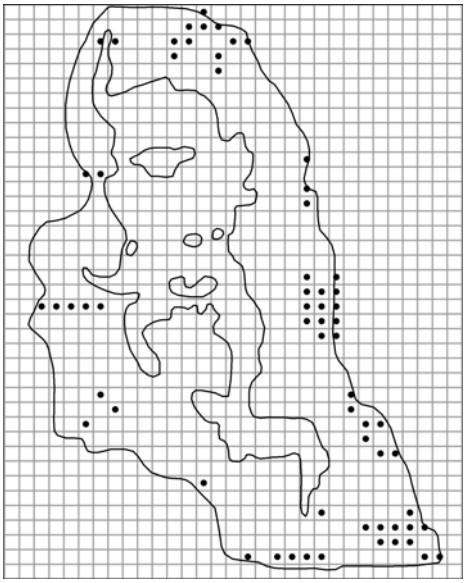
Potamogeton rutilus



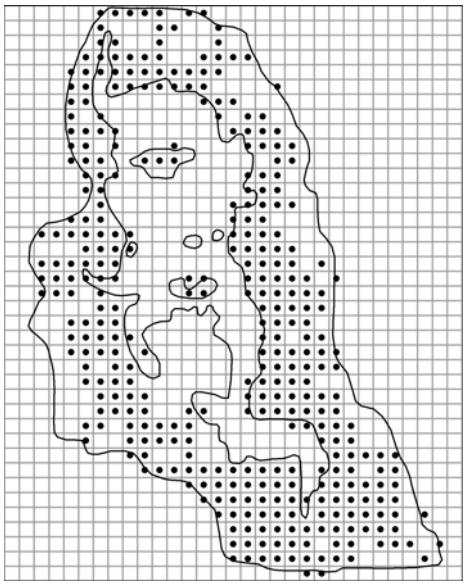
Potentilla anglica



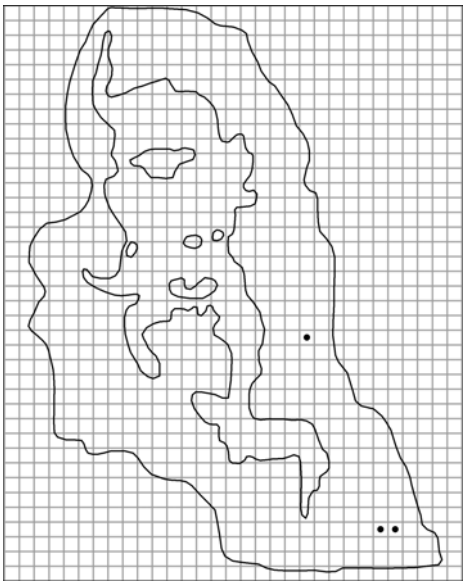
Potentilla anserina



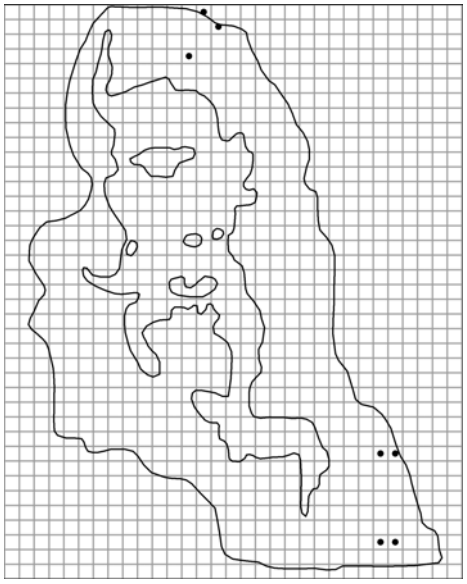
Potentilla argentea



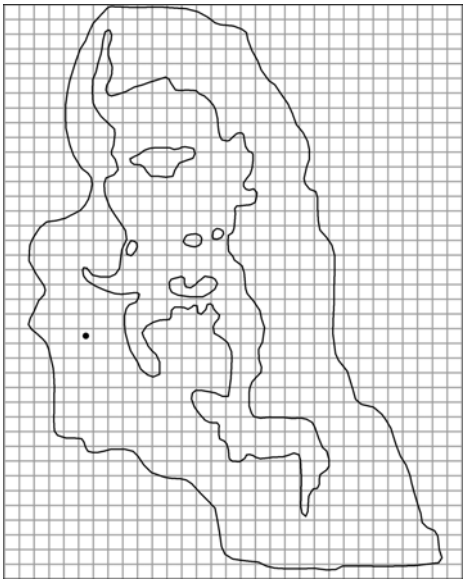
Potentilla erecta



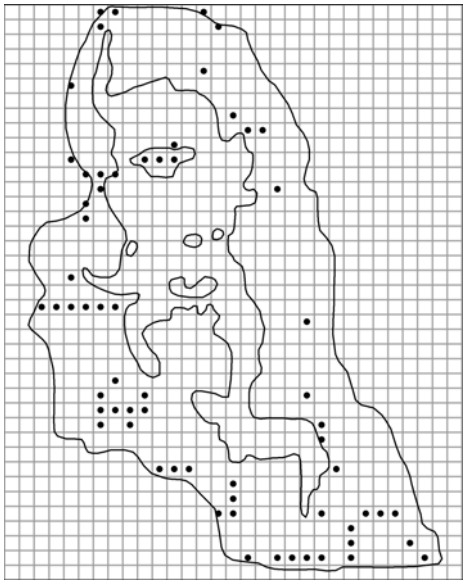
Potentilla heidenreichii



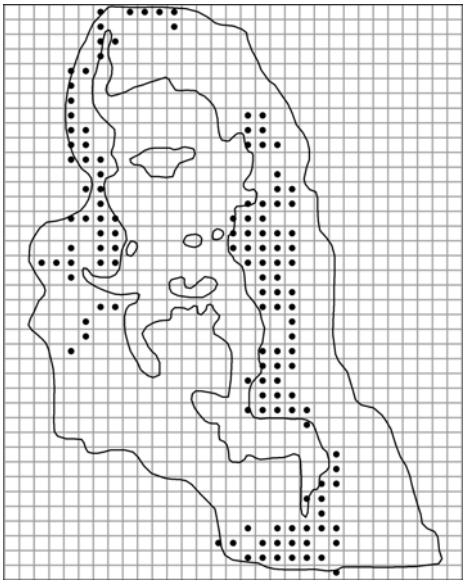
Potentilla impolita



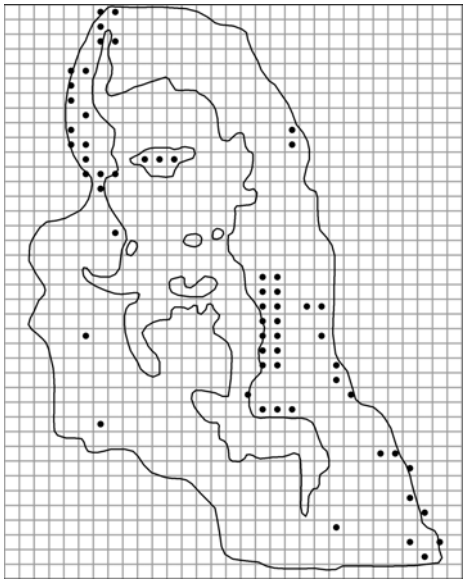
Potentilla norvegica



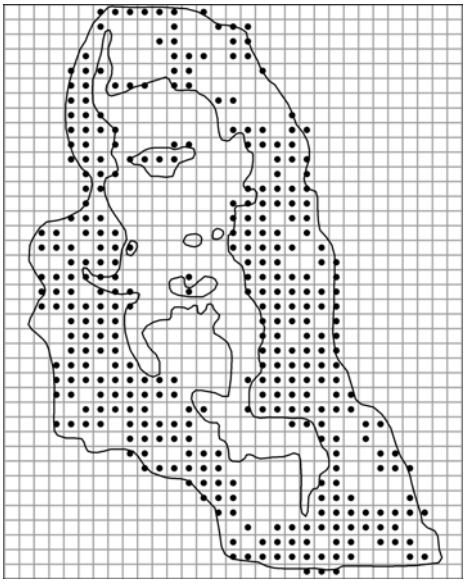
Potentilla reptans



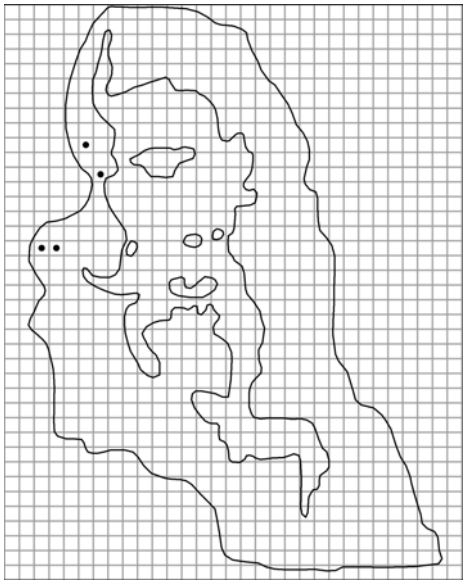
Primula farinosa



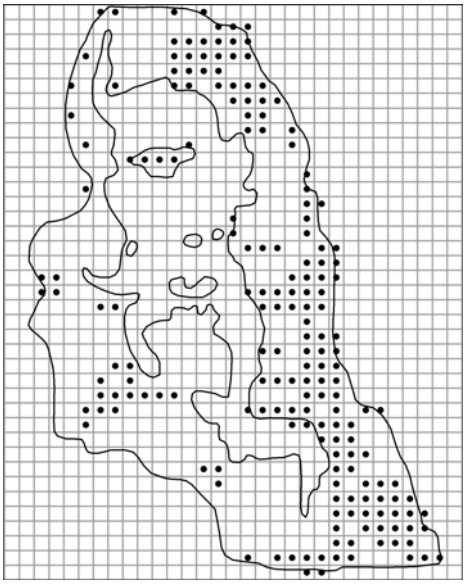
Primula veris



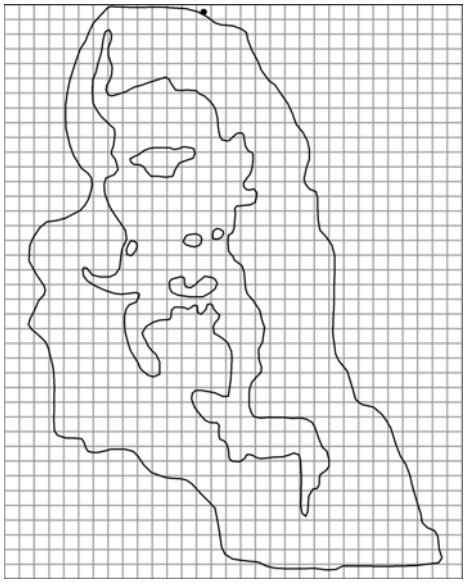
Prunella vulgaris



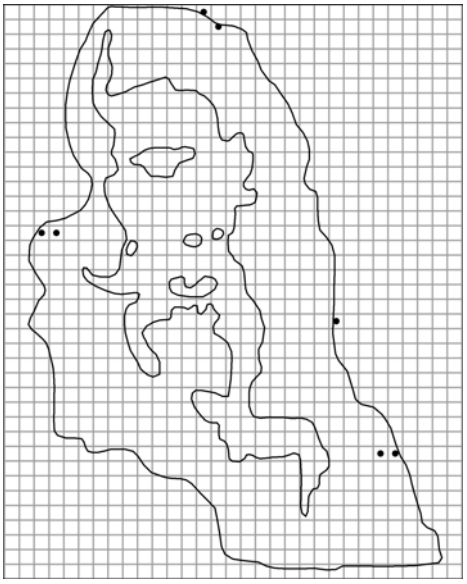
Ptarmica vulgaris



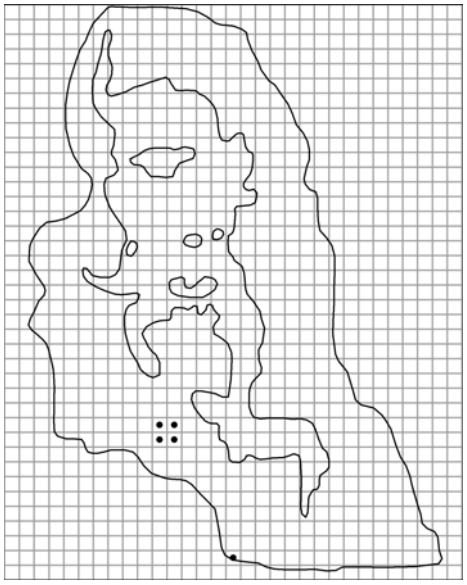
Pteridium aquilinum



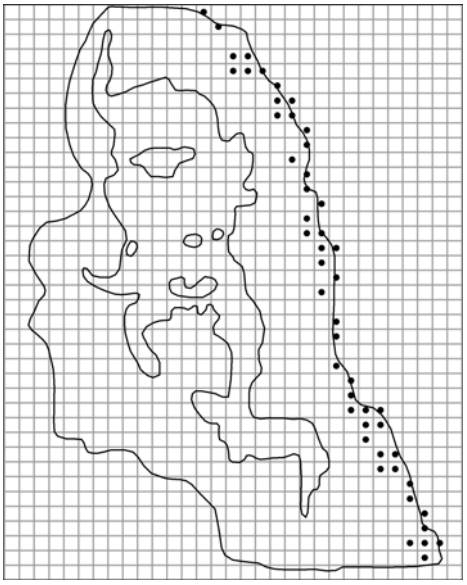
Puccinellia capillaris



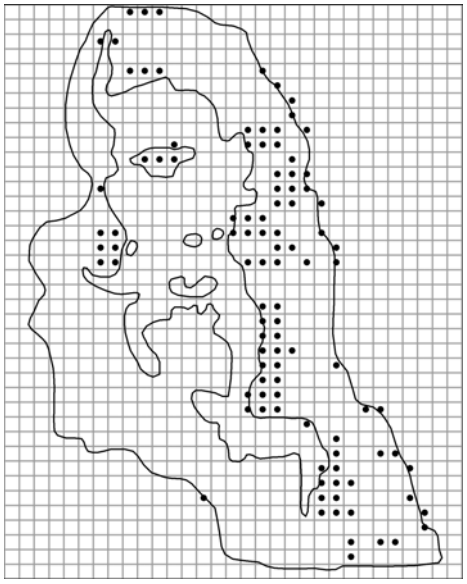
Puccinellia distans



Pulmonaria obscura



Pulsatilla pratensis



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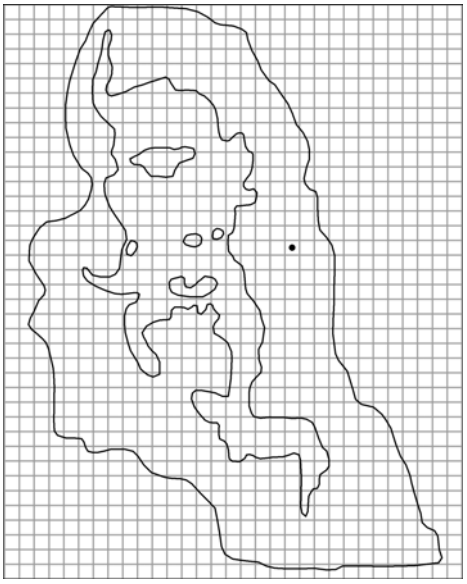
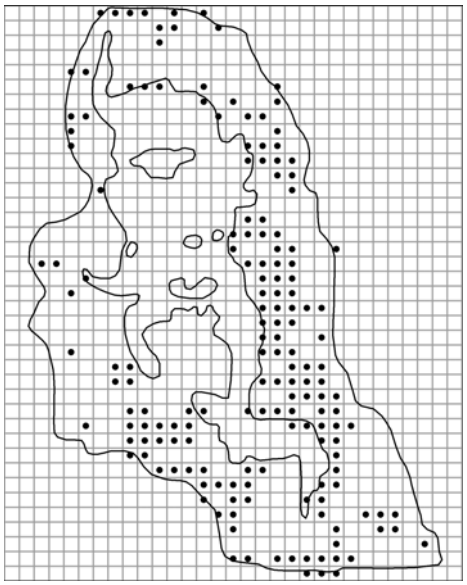


Pyrola media



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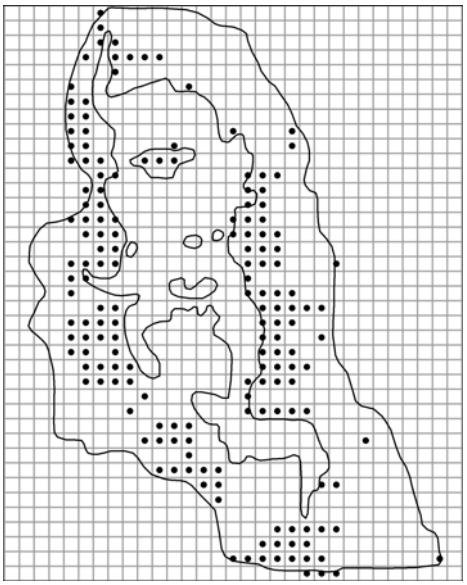

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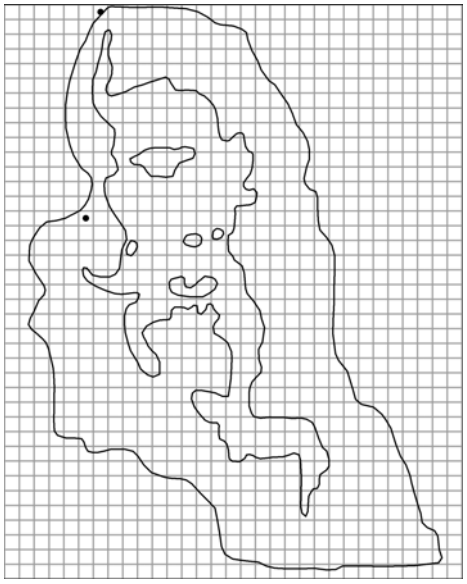
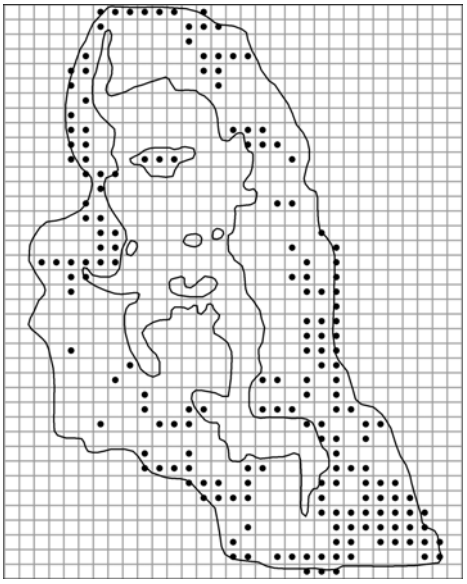
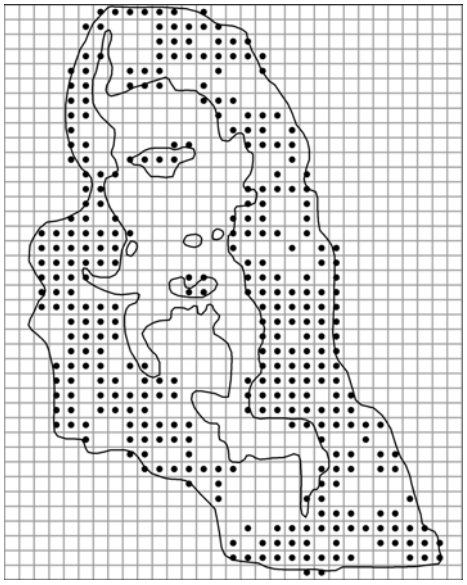


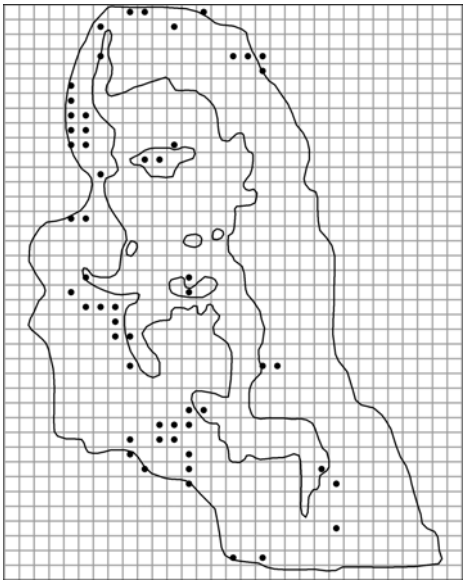
Pyrus pyraster var. achras



Quercus robur



Ranunculus acris



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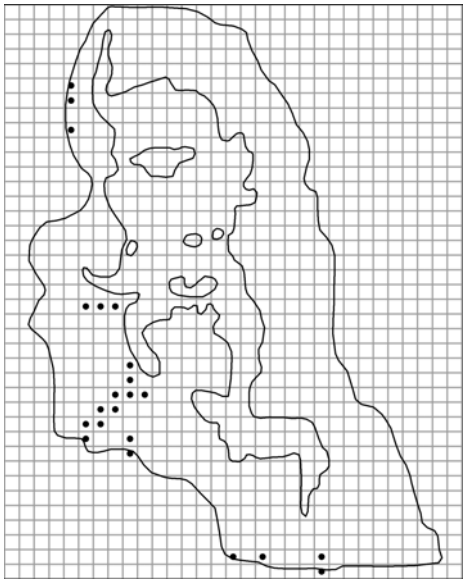

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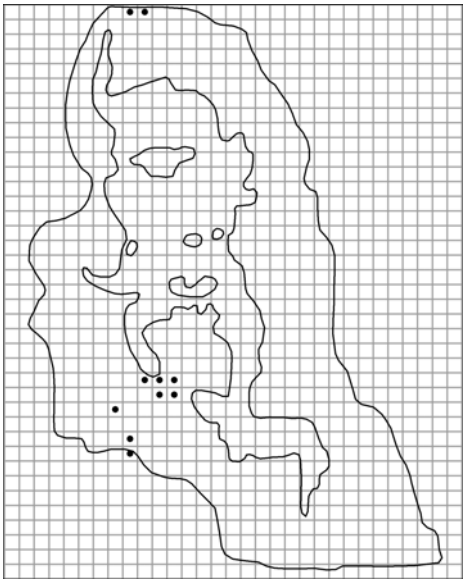

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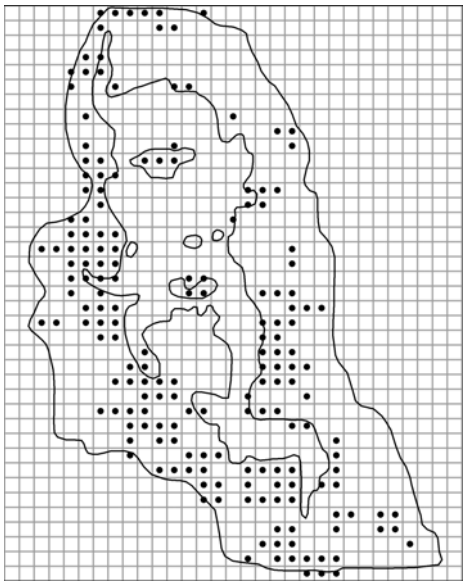

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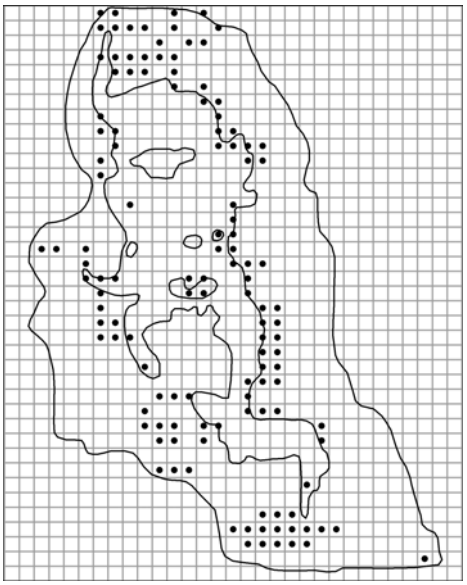
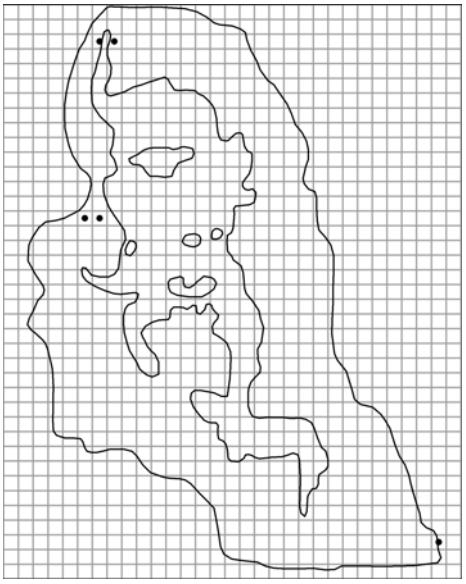


Ranunculus lingua



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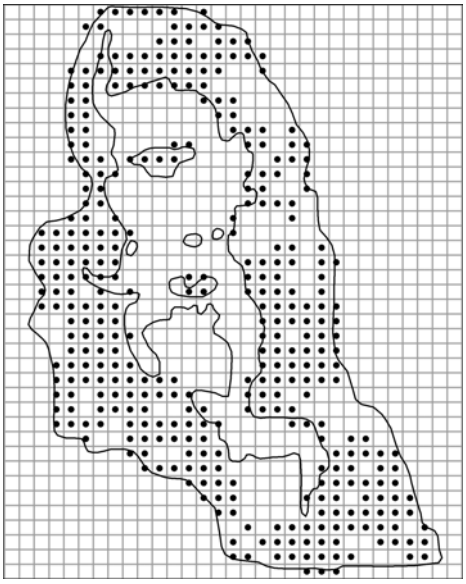
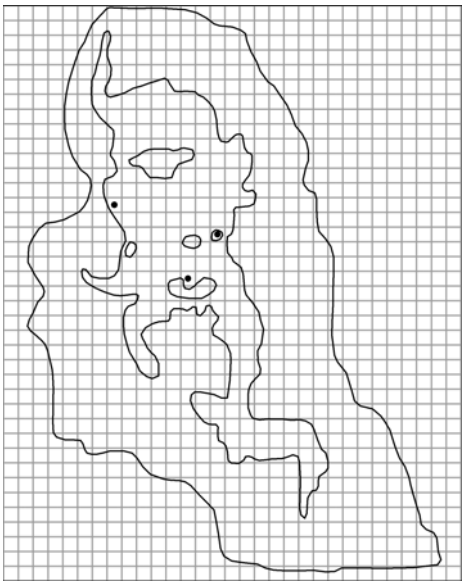
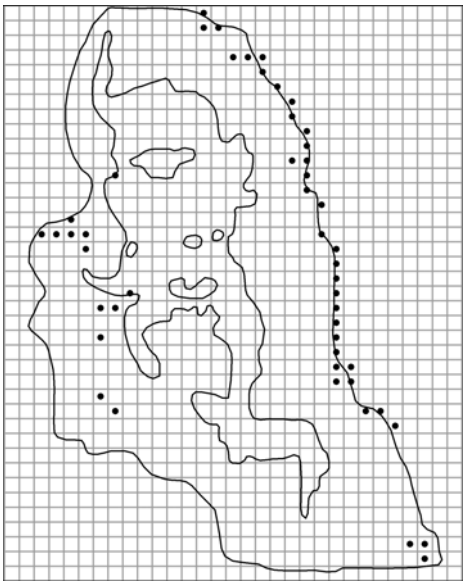


Ranunculus repens



Ranunculus reptans



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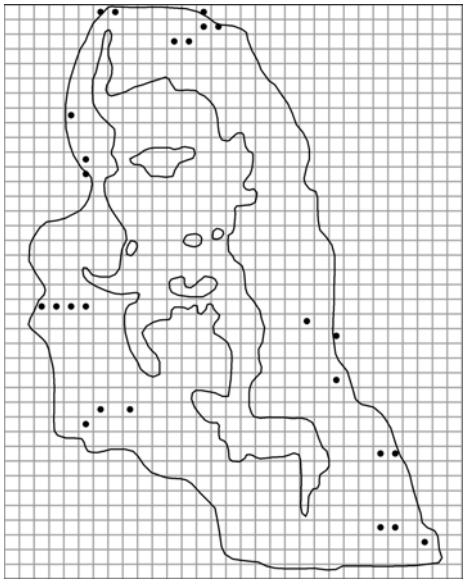
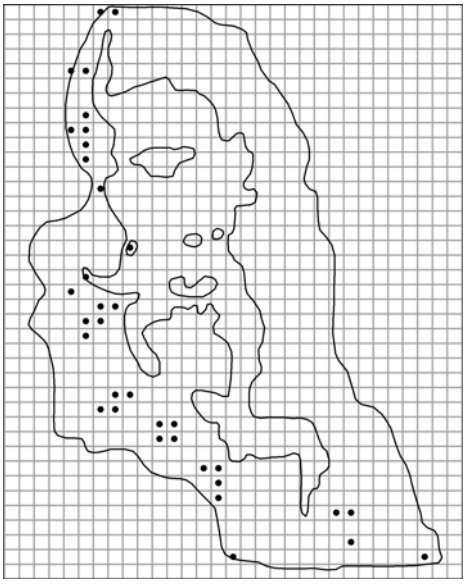


Raphanus raphanistrum



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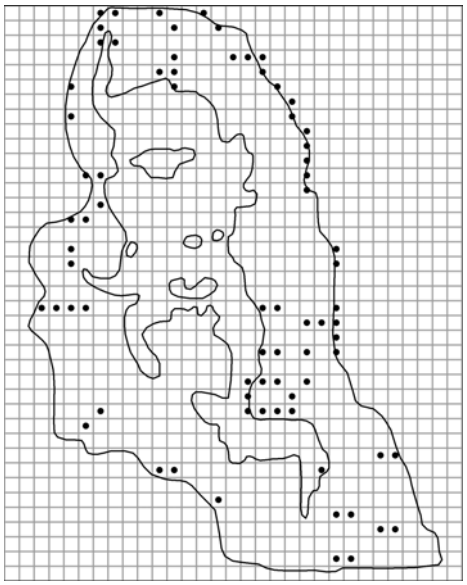
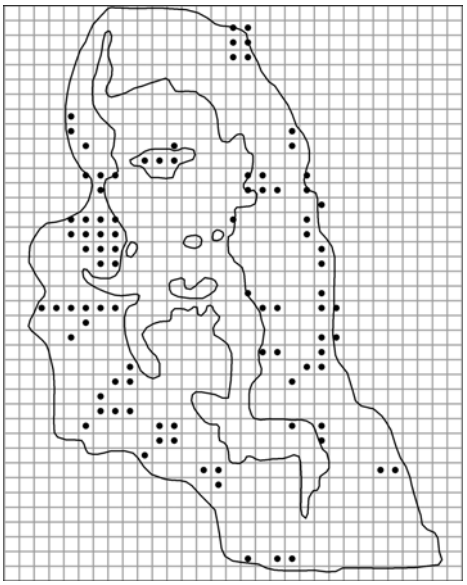
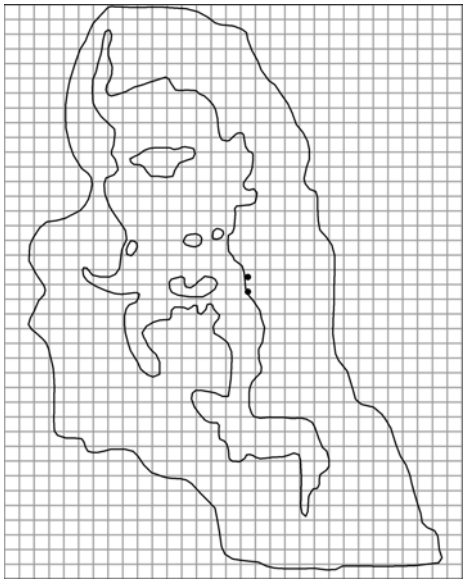


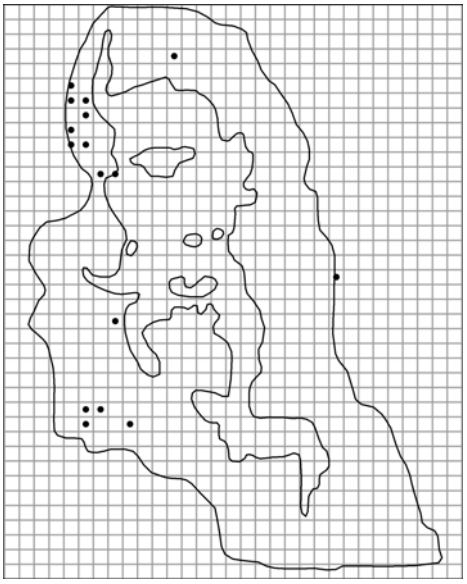
Rhinanthus minor



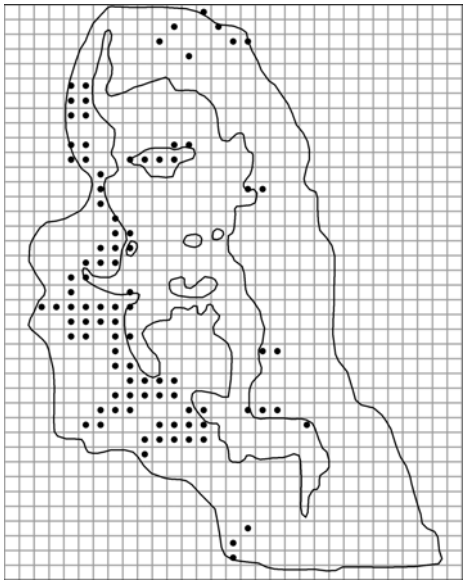
Rhinanthus serotinus



Rhinanthus vernalis



Ribes alpinum



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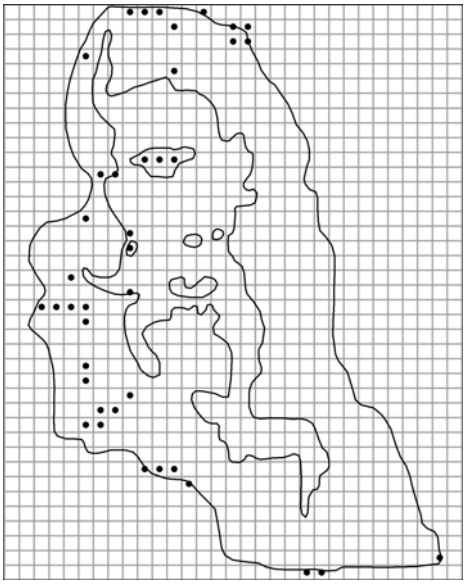
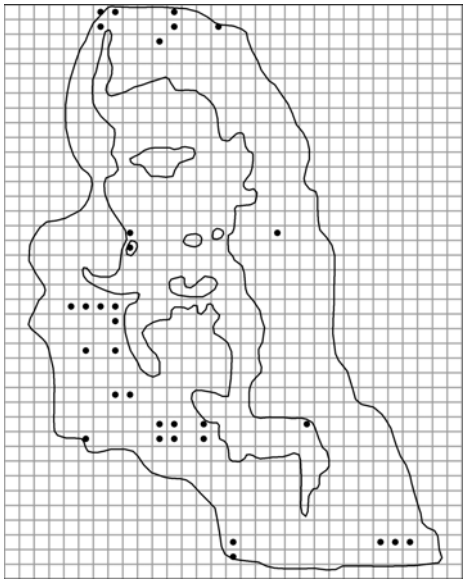


Ribes rubrum



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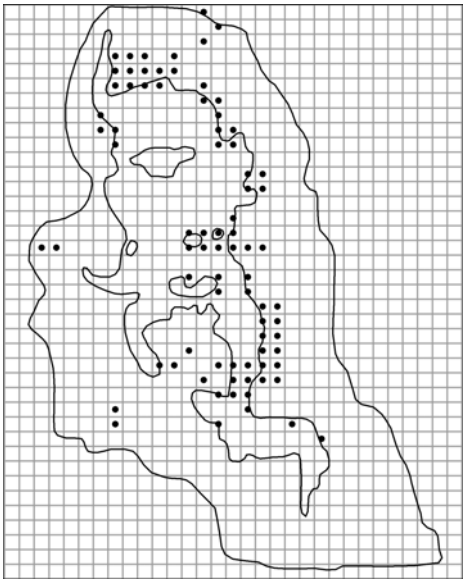
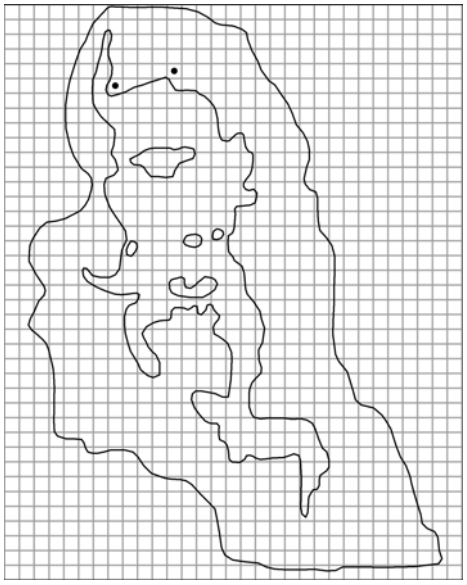
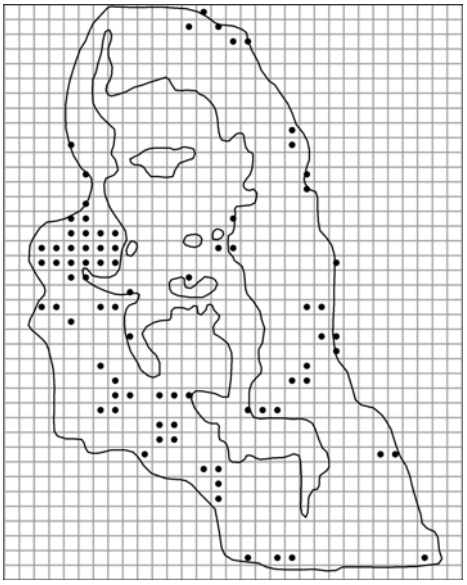


Rorippa amphibia



Rorippa × anceps



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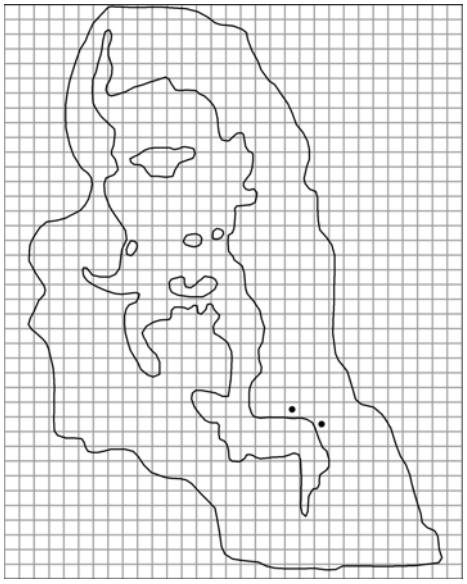

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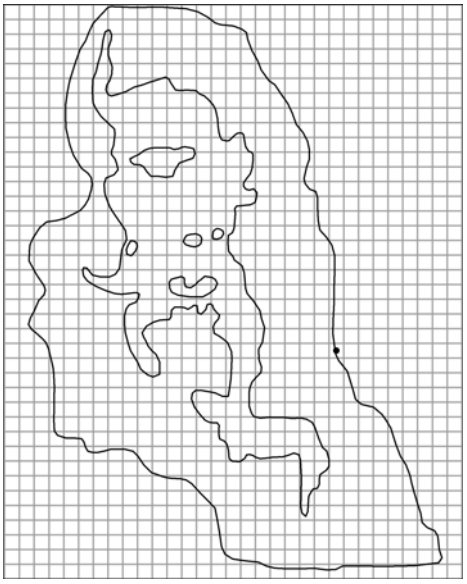
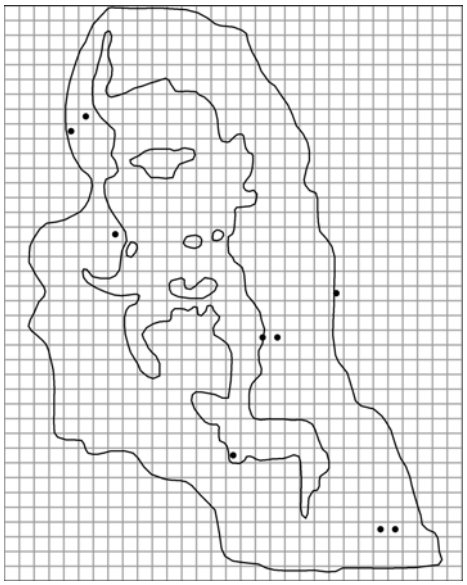
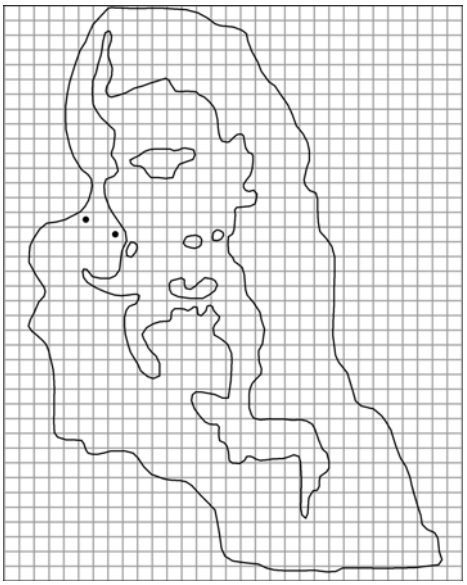


Rosa acicularis



Rosa canina



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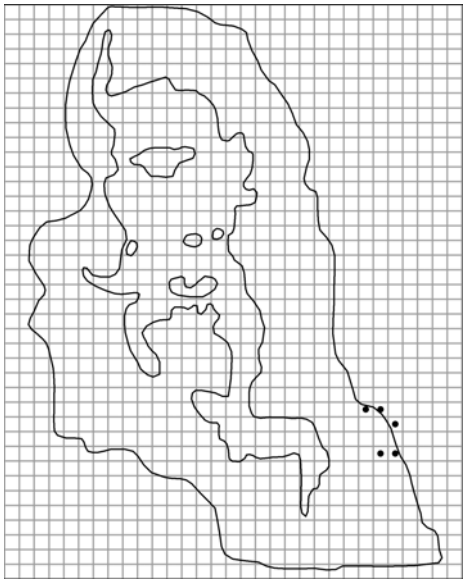
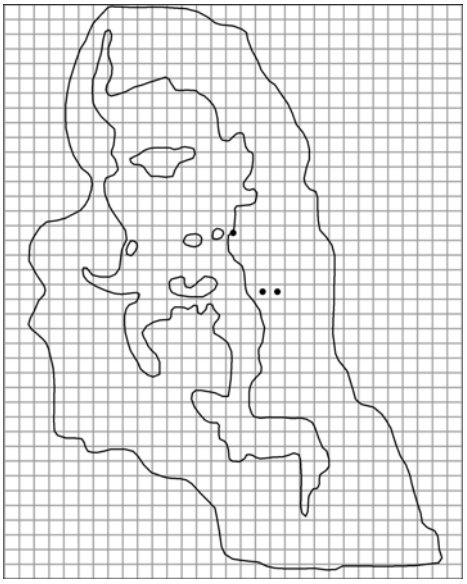


Rosa majalis



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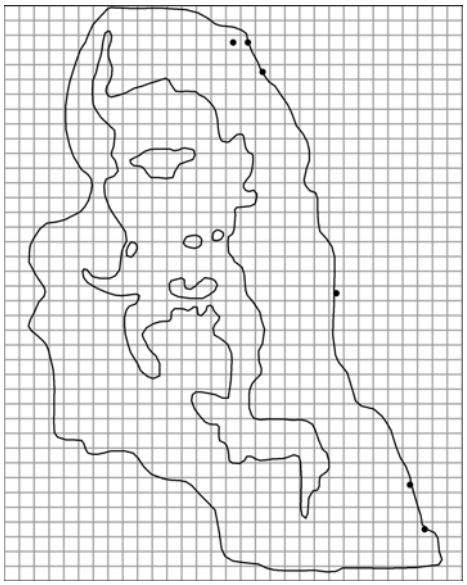
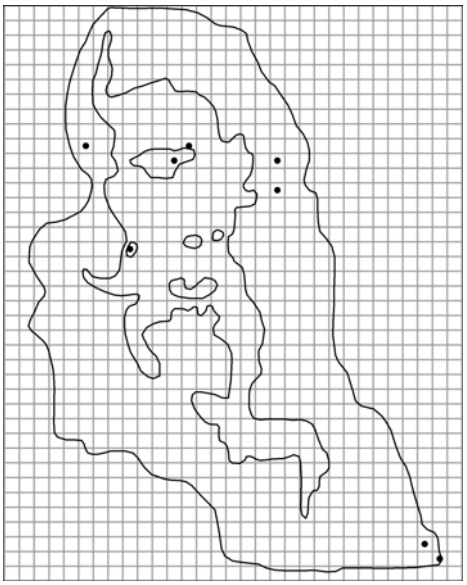
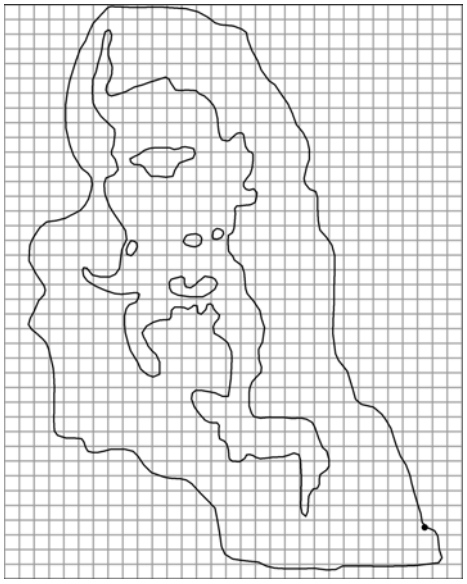


Rosa rugosa



Rosa subcanina



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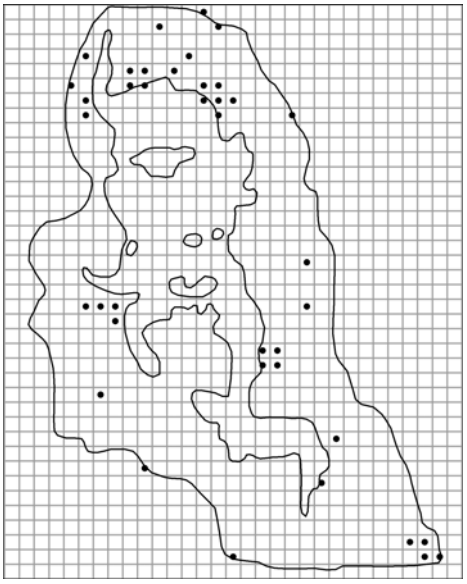
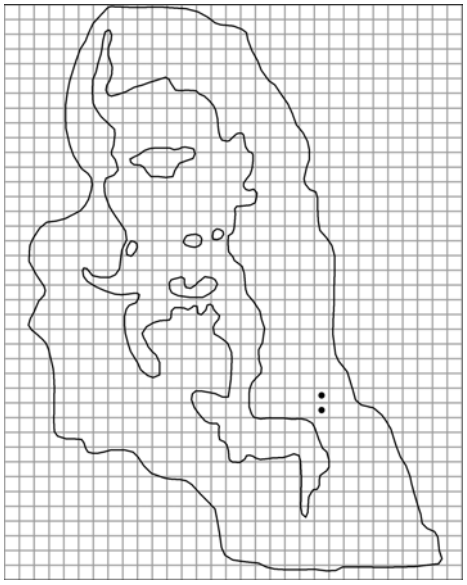
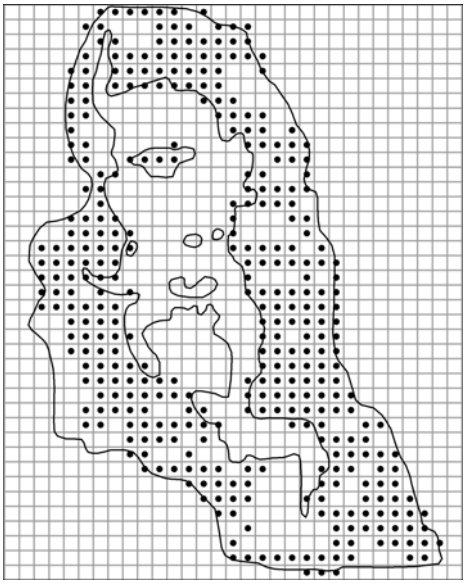


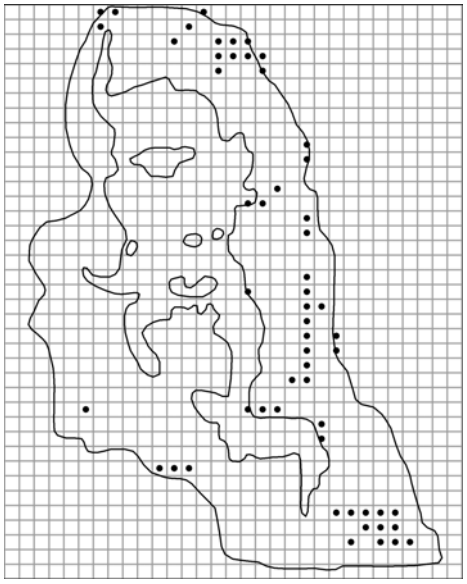
Rubus caesius



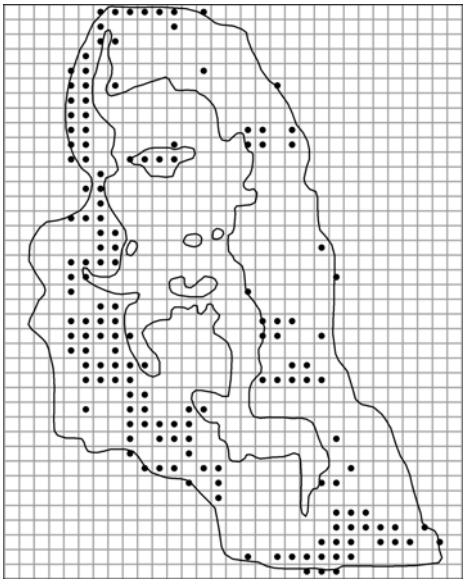
Rubus chamaemorus



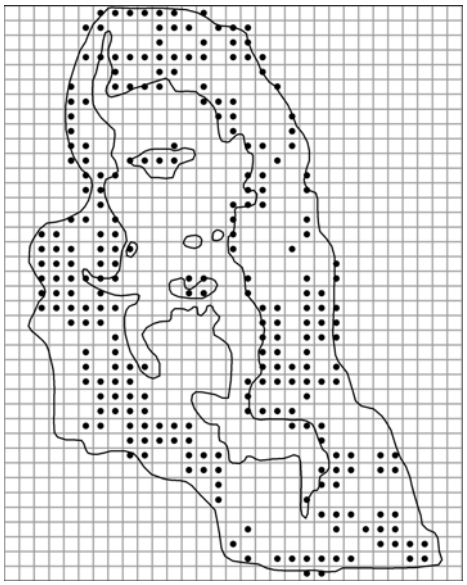
Rubus idaeus



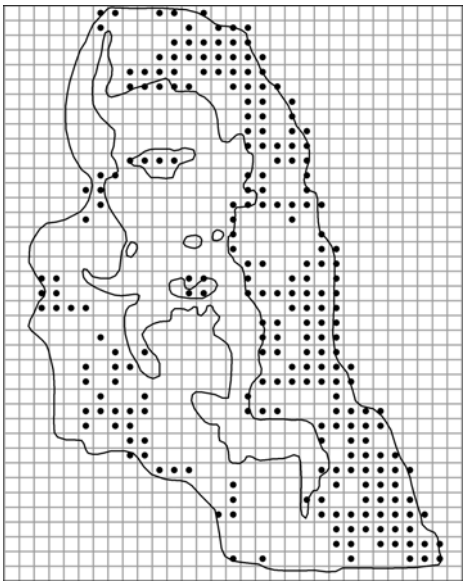
Rubus nessensis



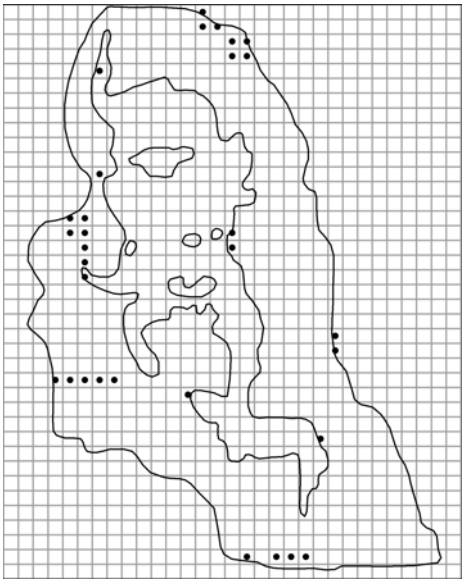
Rubus saxatilis



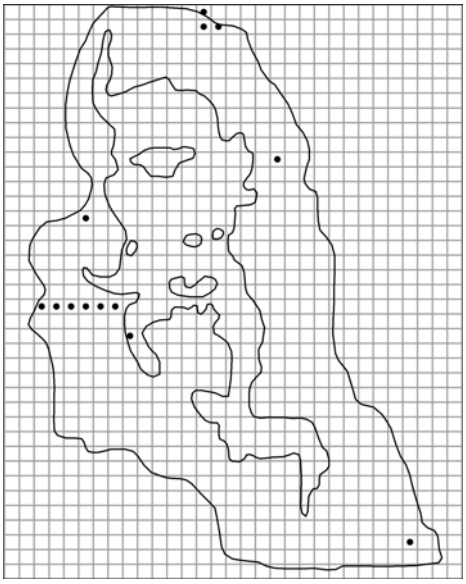
Rumex acetosa



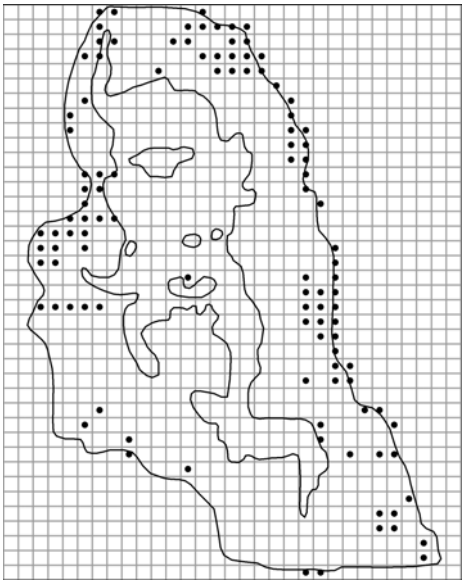
Rumex acetosella



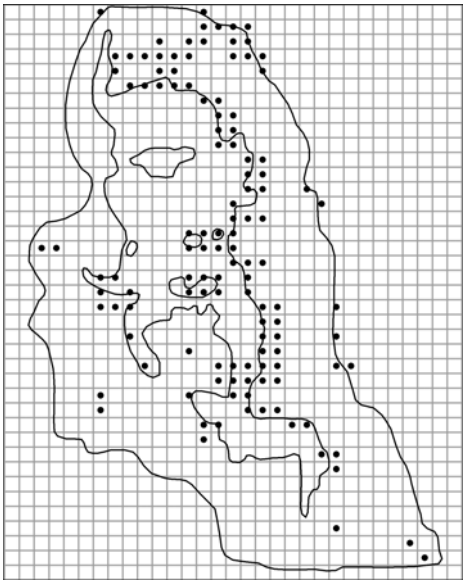
Rumex aquaticus



Rumex confertus



Rumex crispus



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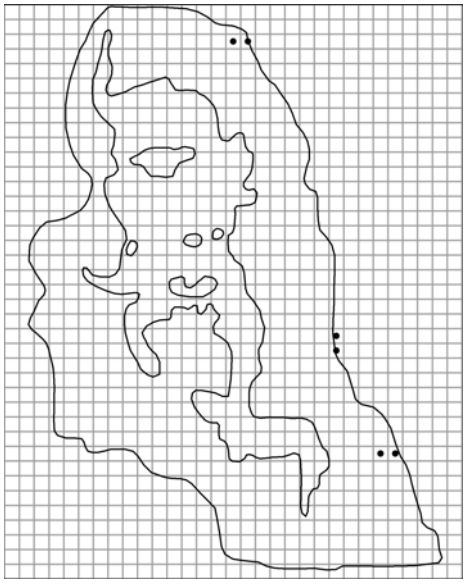
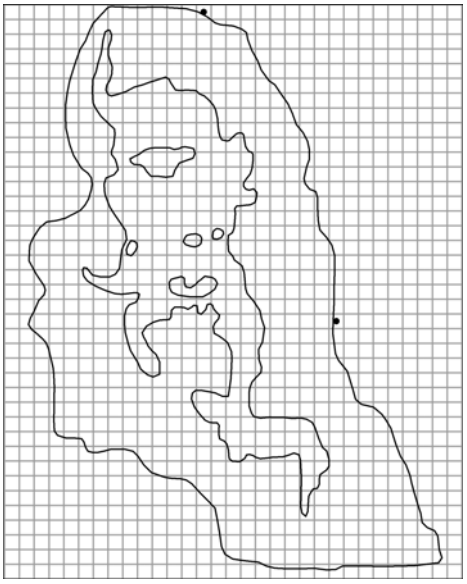
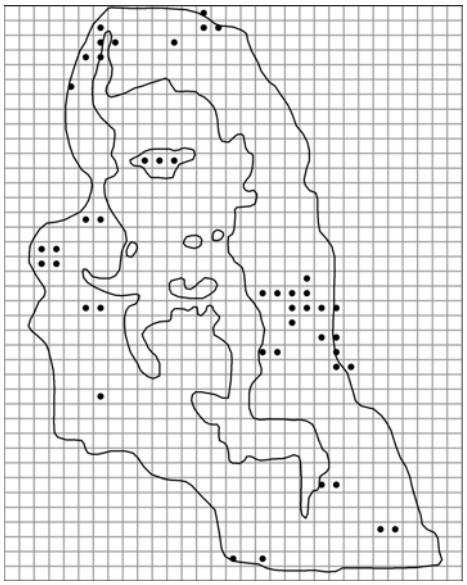


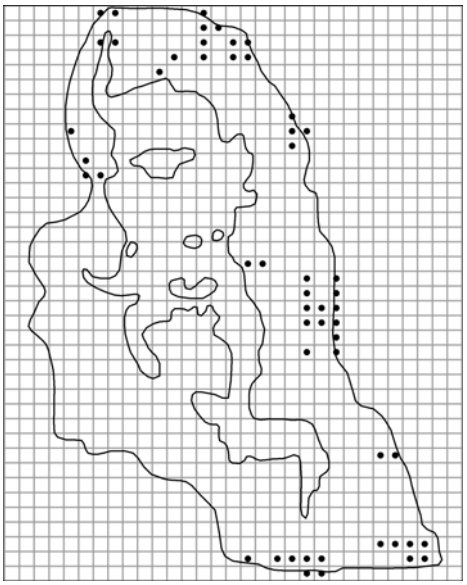
Rumex longifolius



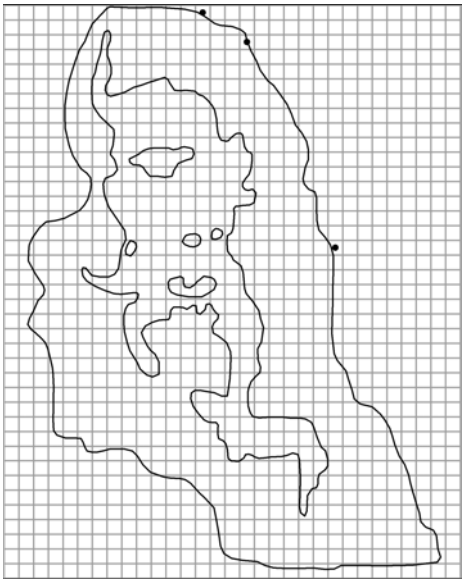
Rumex maritimus



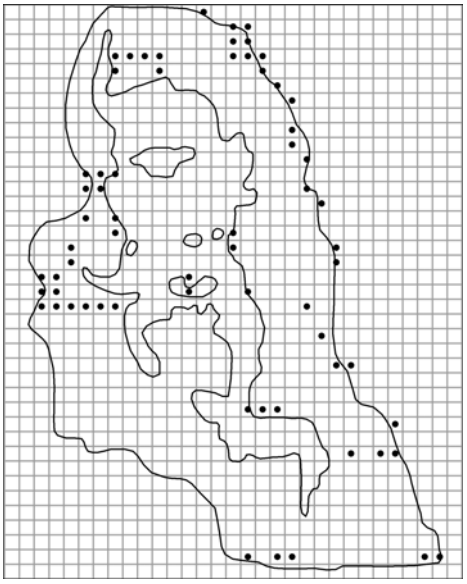
Rumex obtusifolius



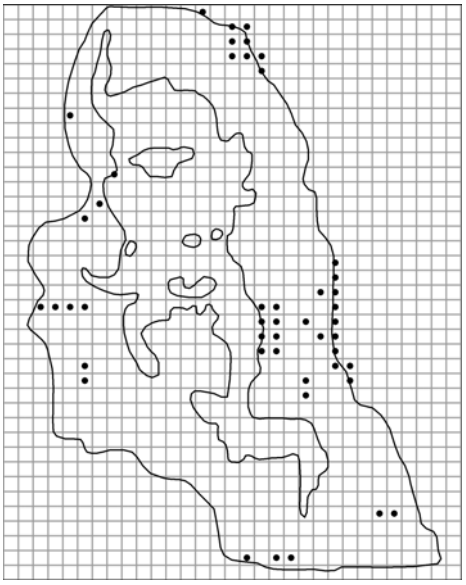
Rumex thyrsiflorus



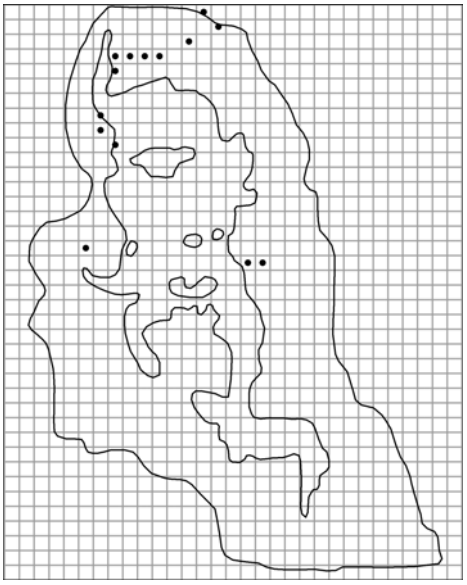
Ruppia maritima



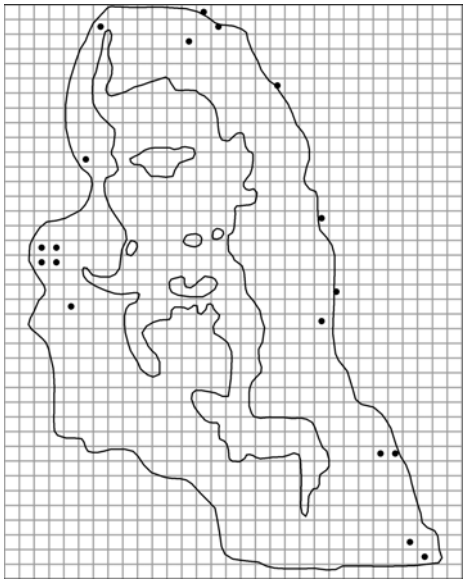
Sagina nodosa



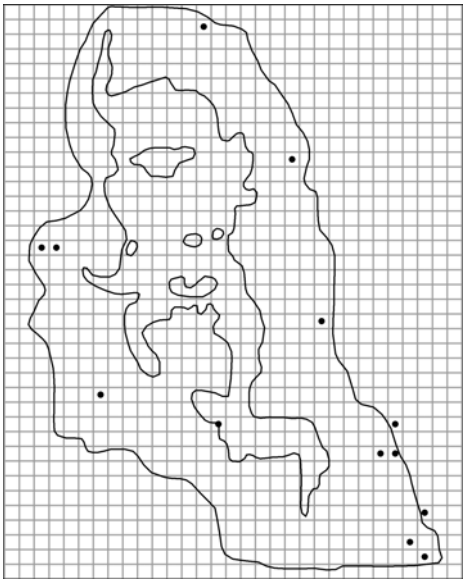
Sagina procumbens



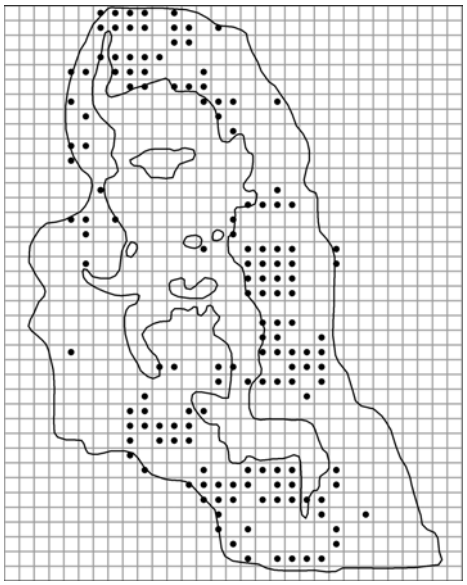
Sagittaria sagittifolia



Salix acutifolia



Salix alba



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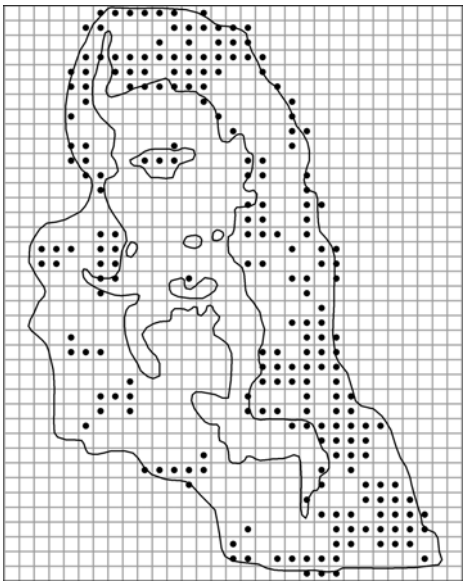

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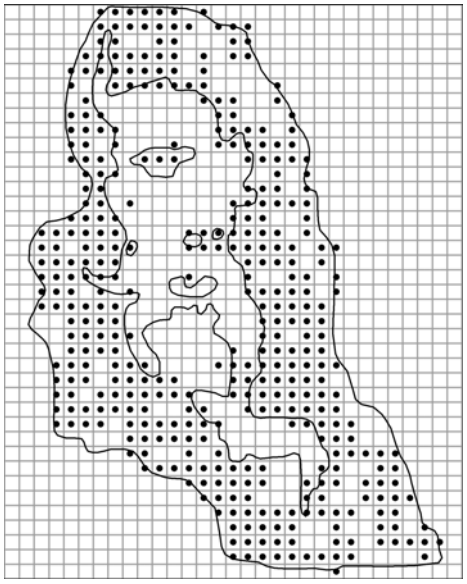
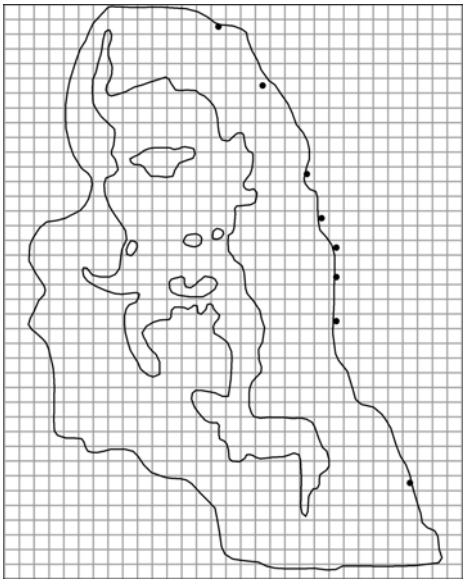
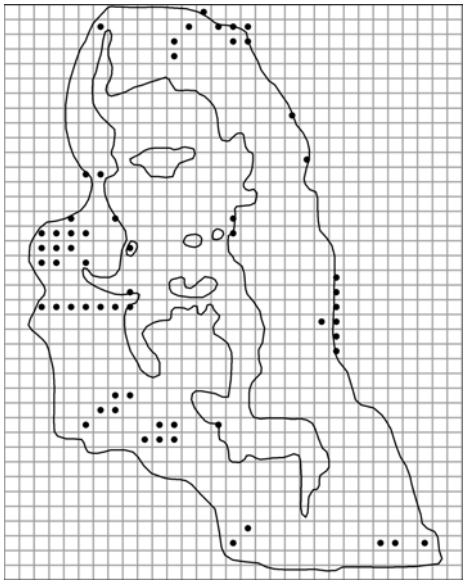


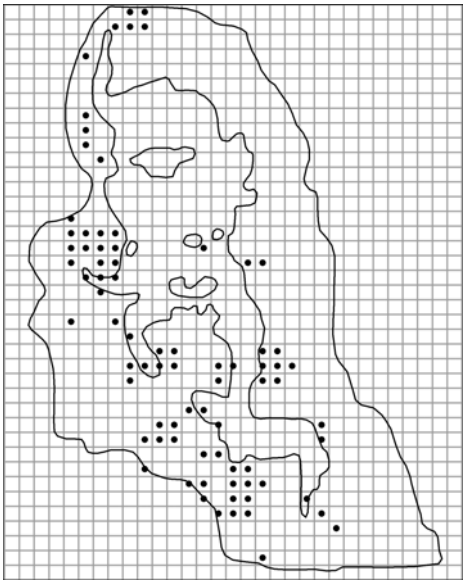
Salix cinerea



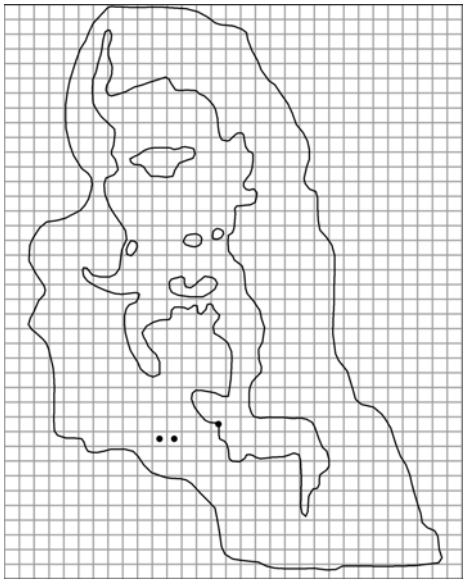
Salix daphnoides



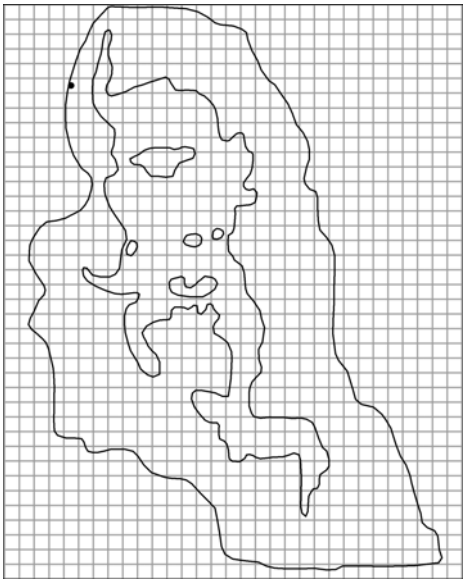
Salix fragilis



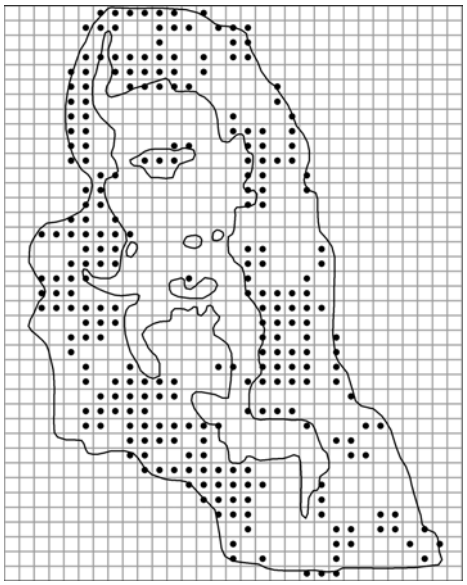
Salix lapponum



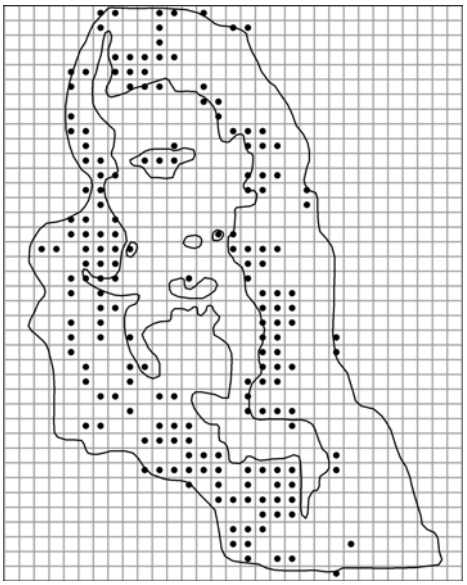
Salix × livescens



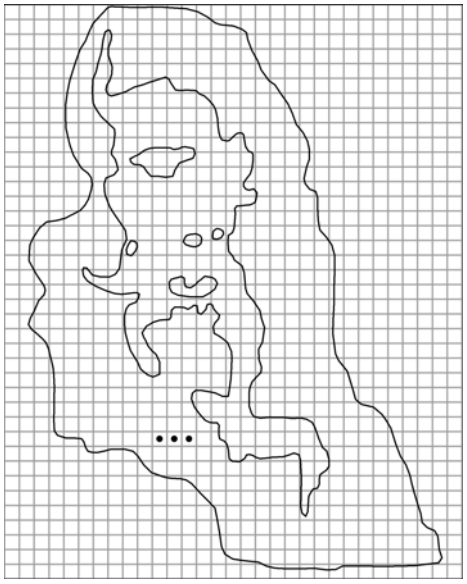
Salix × multinervis



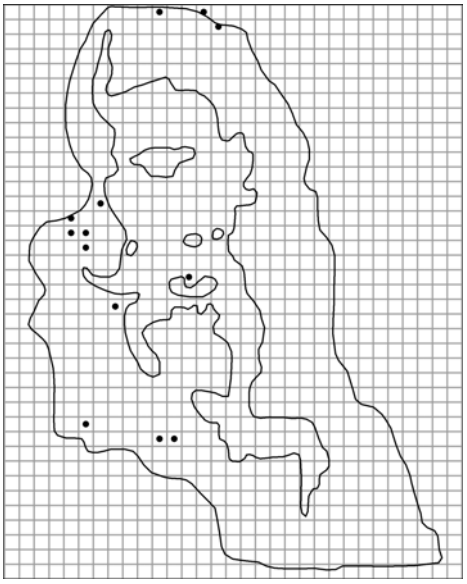
Salix myrsinifolia



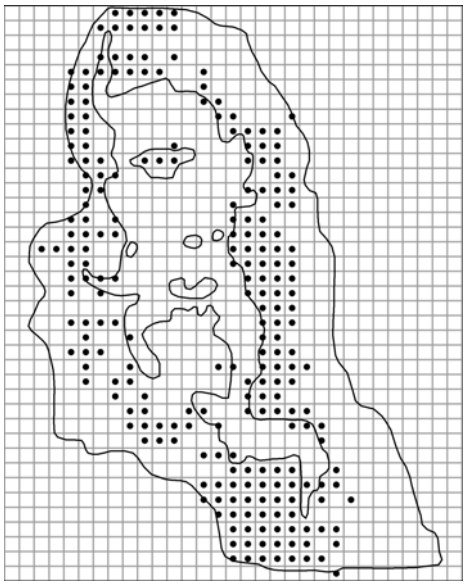
Salix pentandra



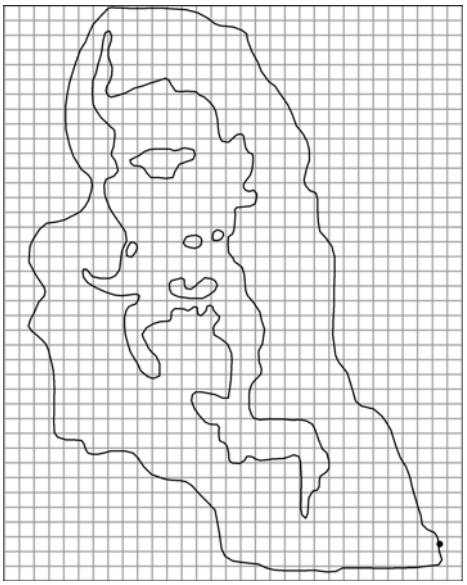
Salix phylicifolia



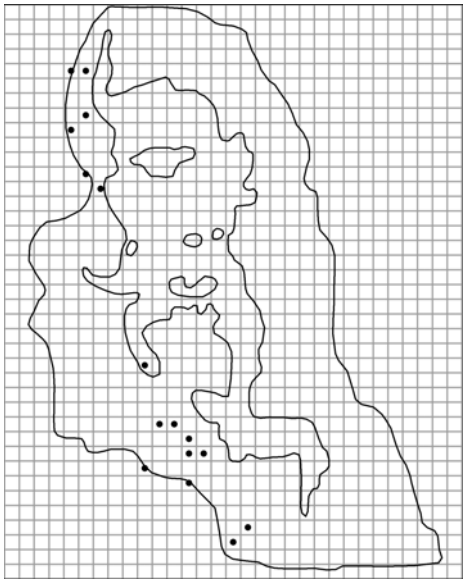
Salix purpurea



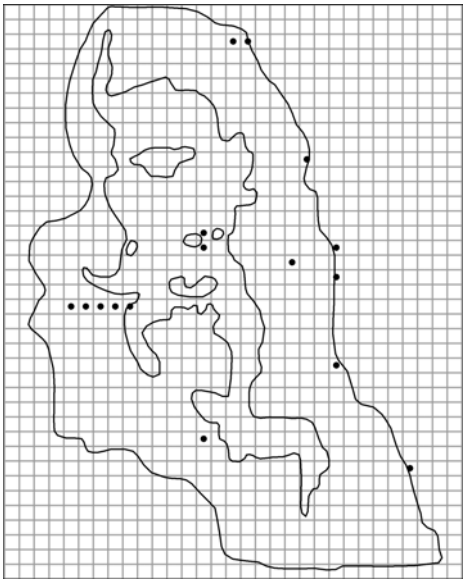
Salix rosmarinifolia



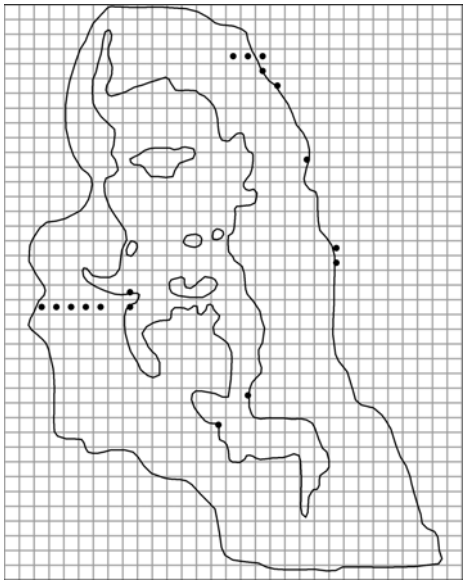
Salix × rubens



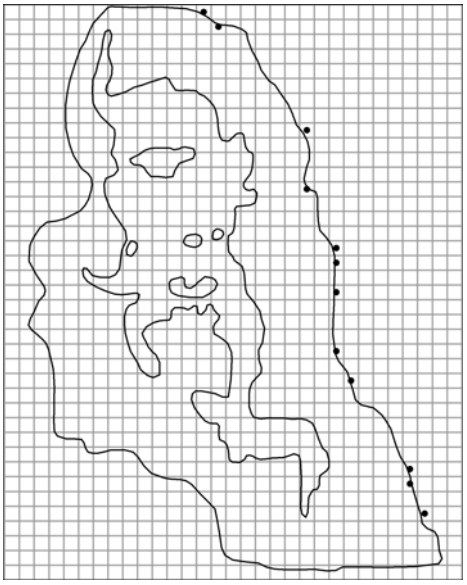
Salix starkeana



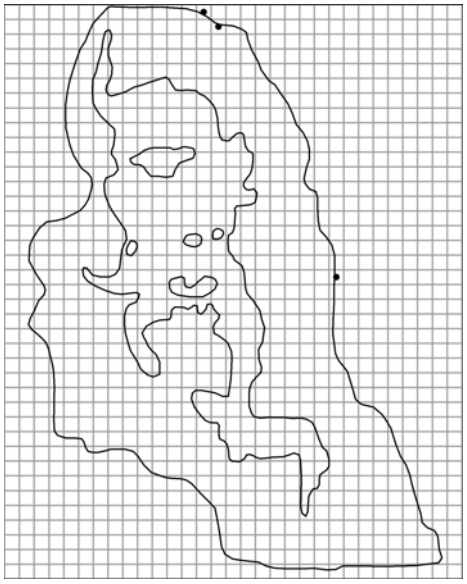
Salix triandra



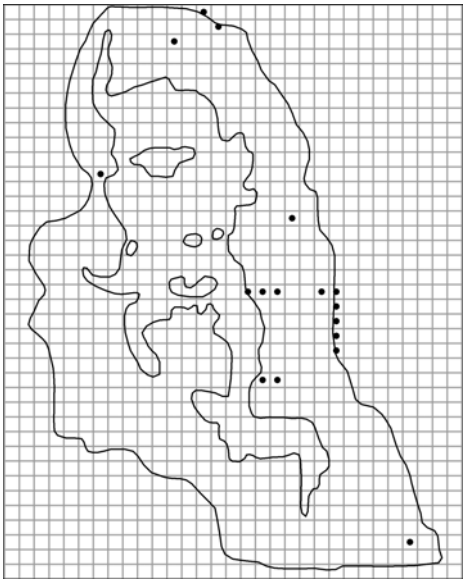
Salix viminalis



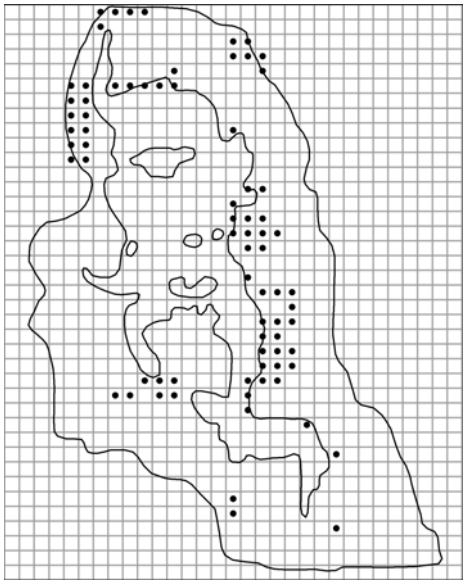
Salsola kali



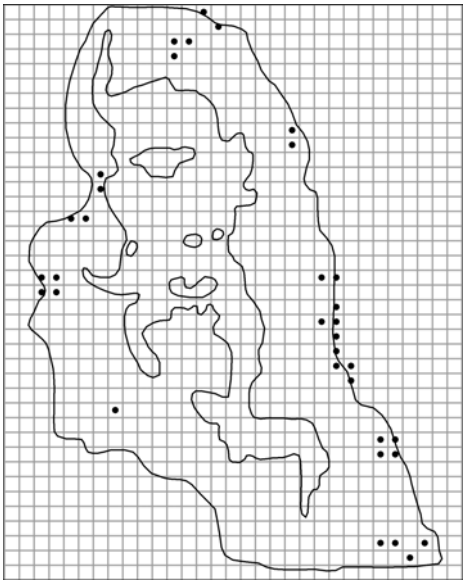
Sambucus nigra



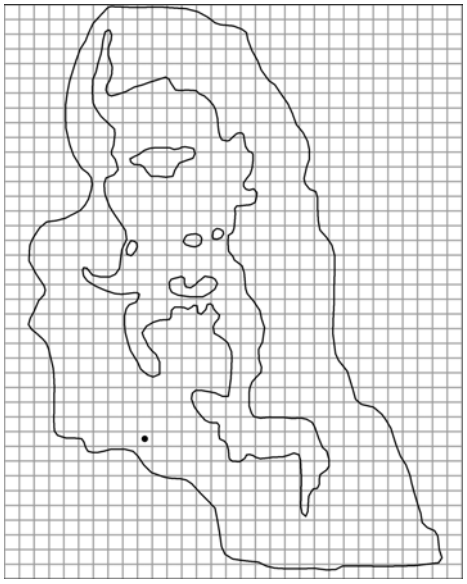
Sambucus racemosa



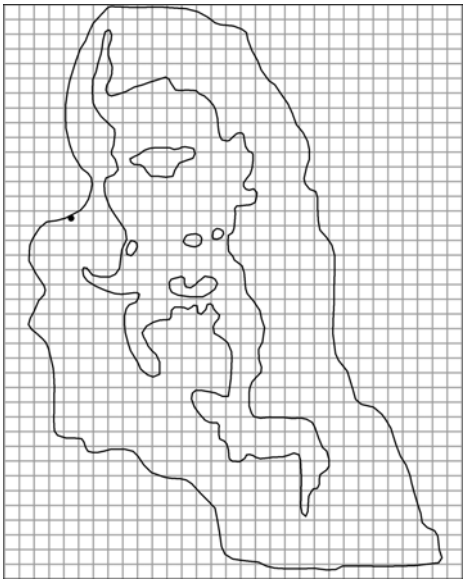
Sanicula europaea



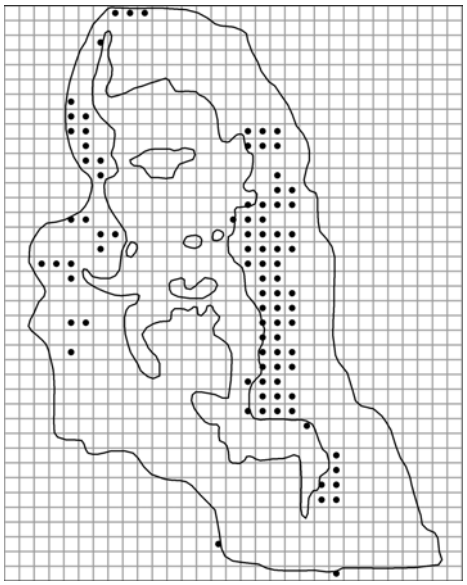
Saponaria officinalis



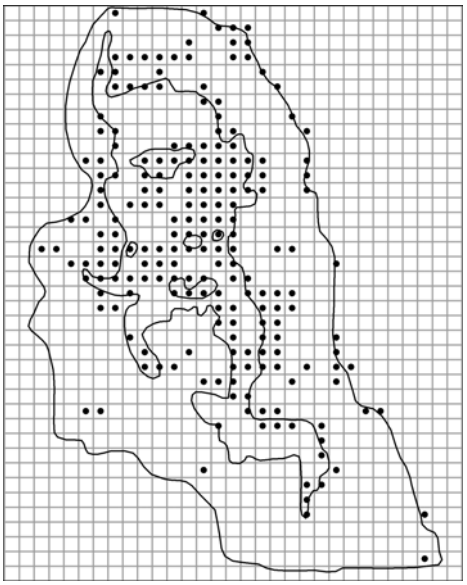
Saxifraga granulata



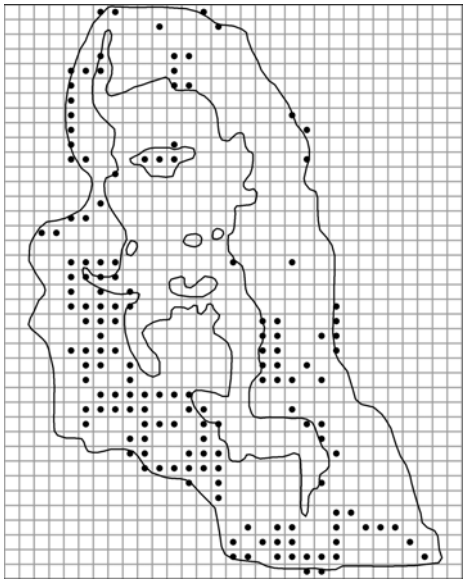
Scheuchzeria palustris



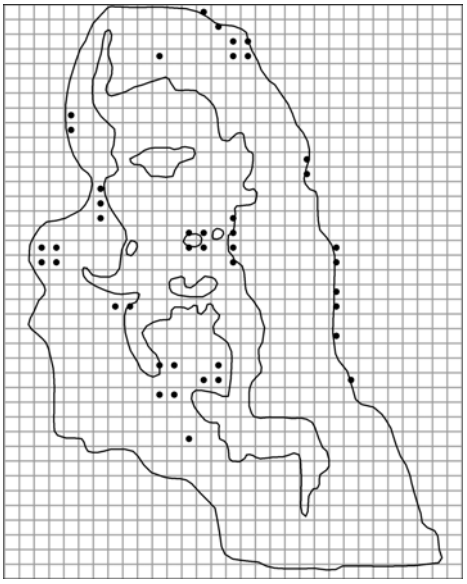
Schoenus ferrugineus



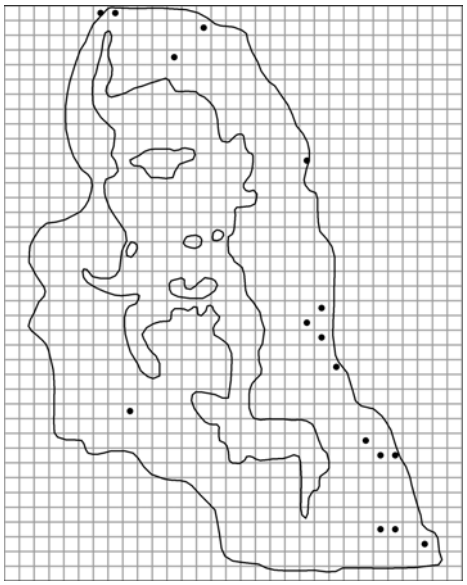
Scirpus lacustris



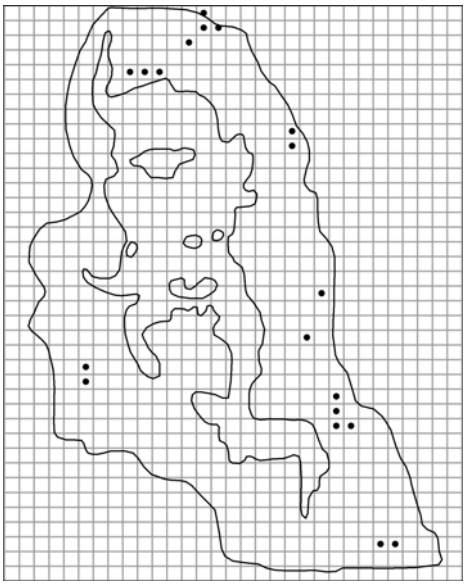
Scirpus sylvaticus



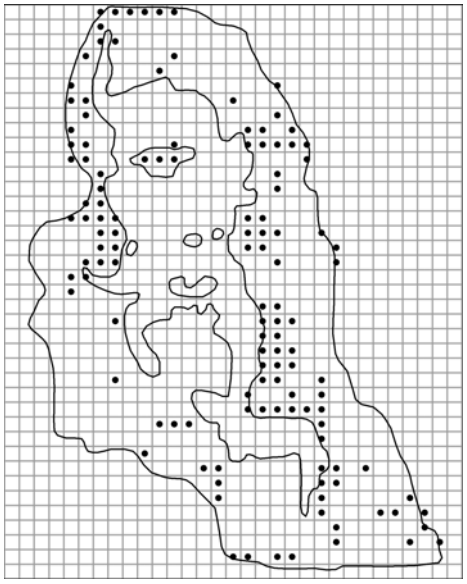
Scirpus tabernaemontani



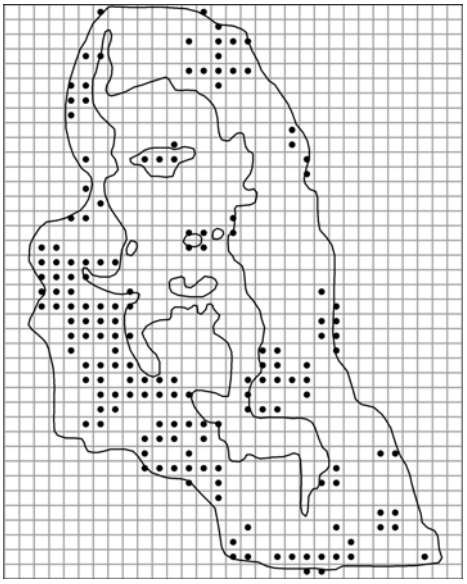
Scleranthus annuus



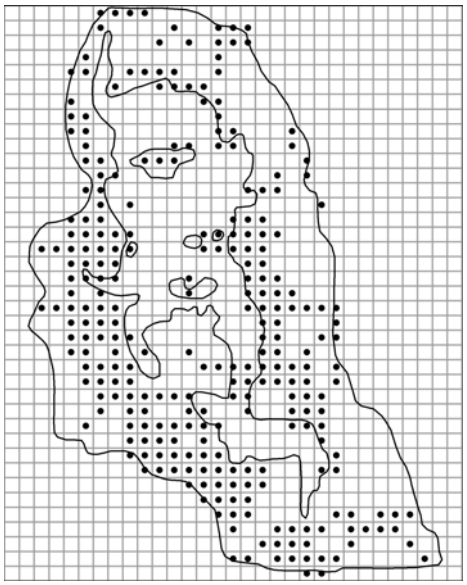
Scleranthus perennis



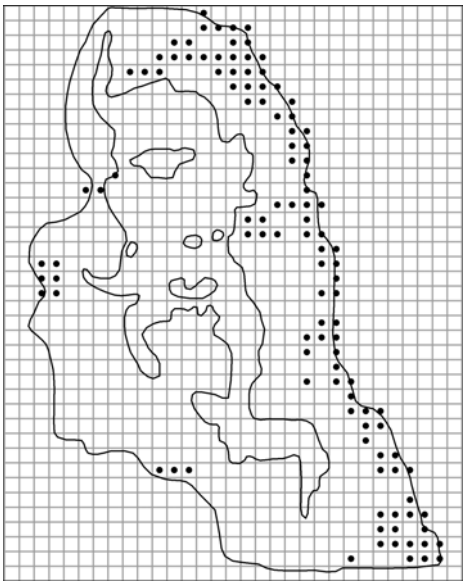
Scorzonera humilis



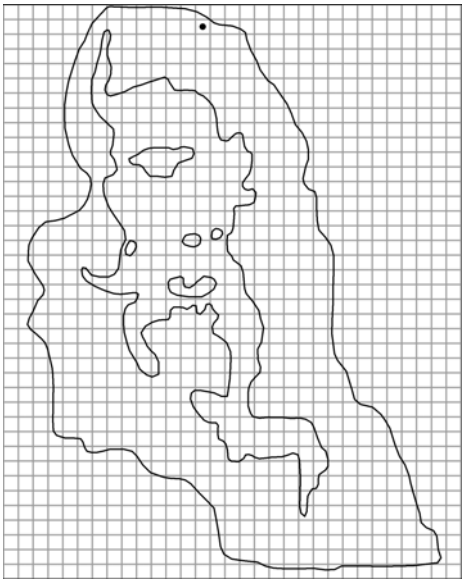
Scrophularia nodosa



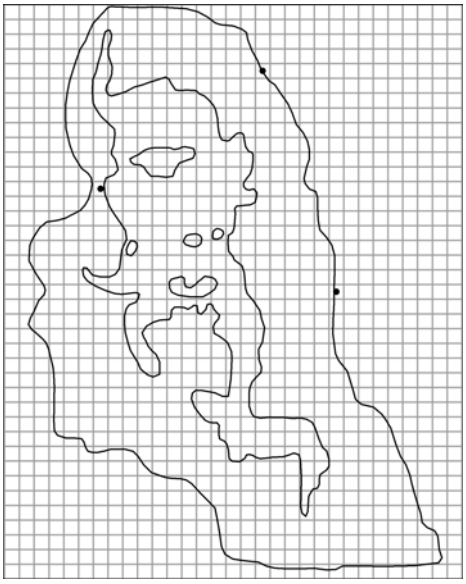
Scutellaria galericulata



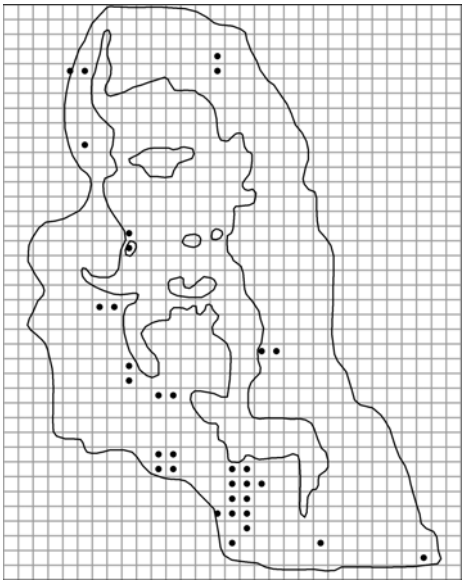
Sedum acre



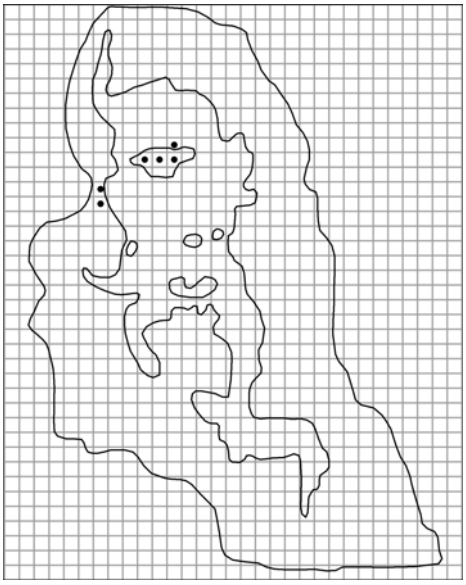
Sedum album



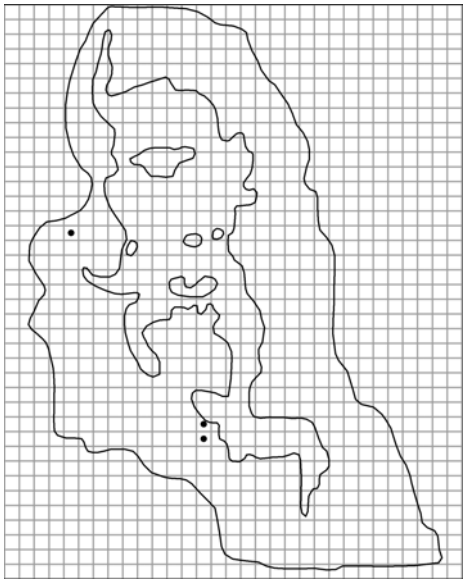
Sedum sexangulare



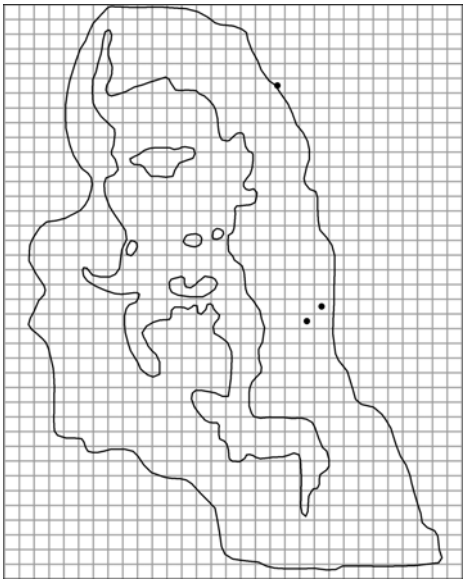
Selinum carvifolia



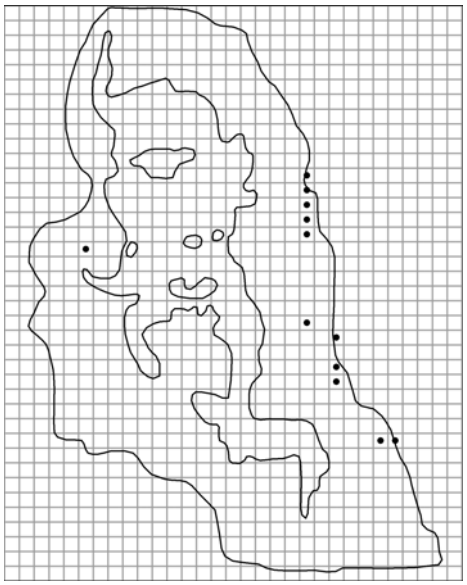
Senecio jacobaea



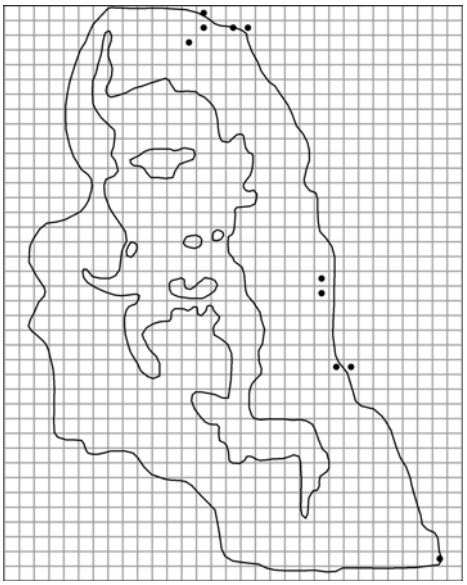
Senecio paludosus



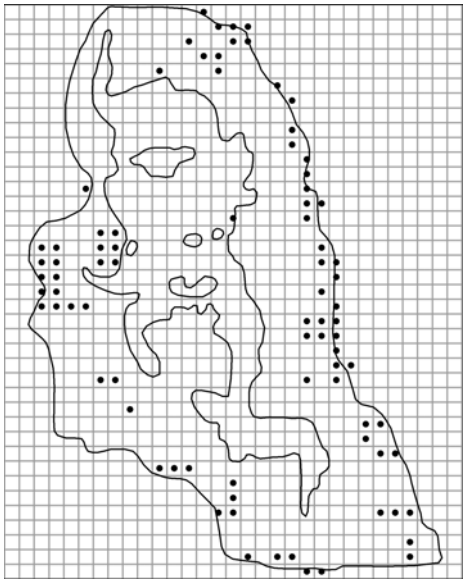
Senecio sylvaticus



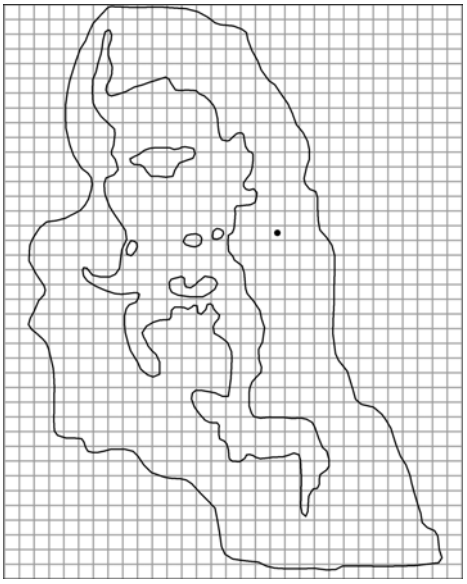
Senecio vernalis



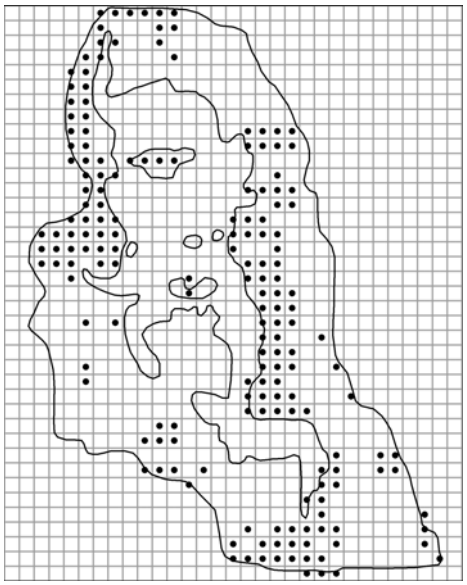
Senecio viscosus



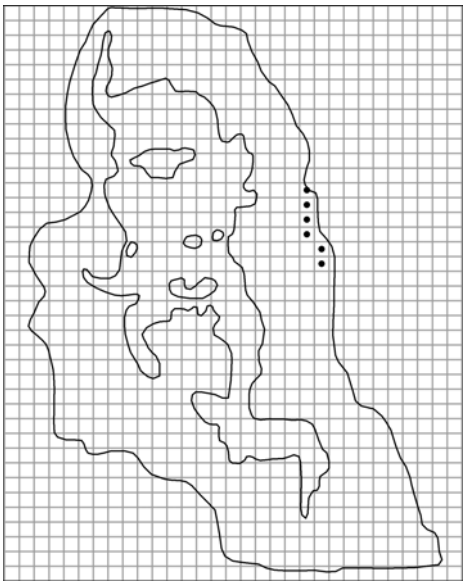
Senecio vulgaris



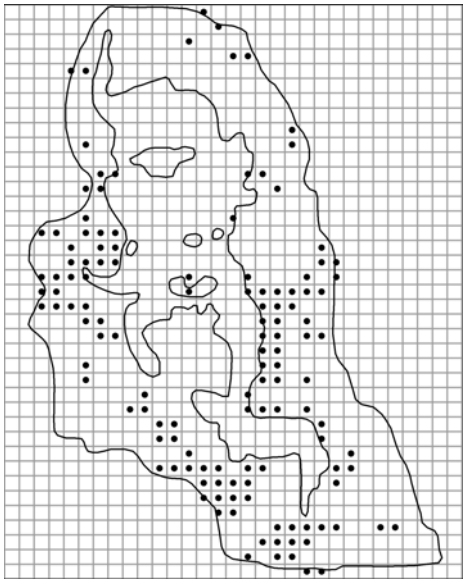
Serratula tinctoria



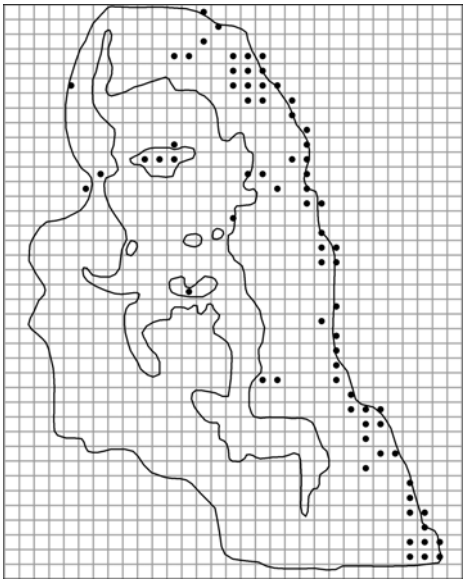
Sesleria caerulea



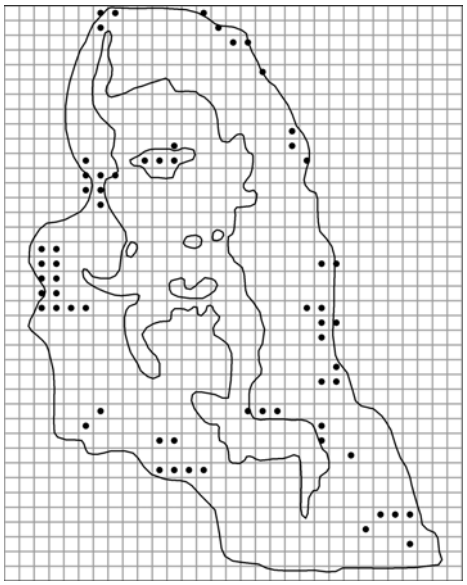
Setaria viridis



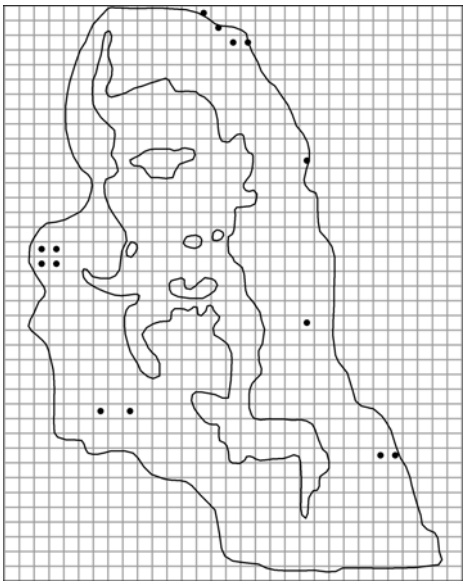
Sieglingia decumbens



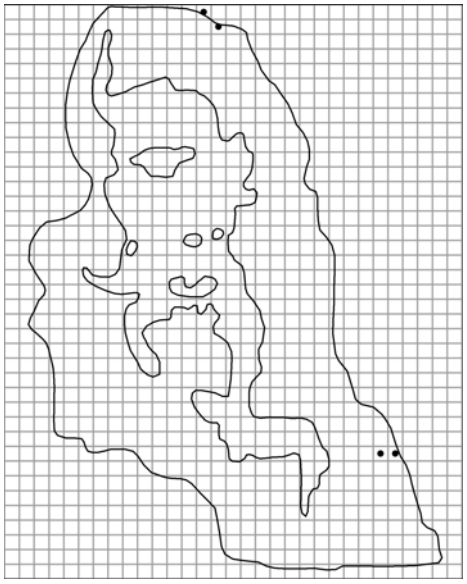
Silene nutans



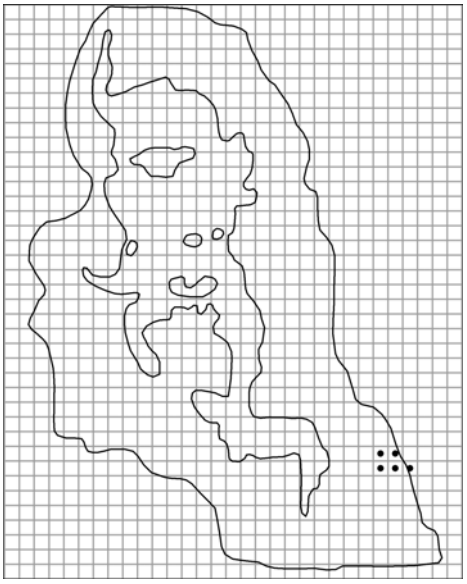
Silene vulgaris



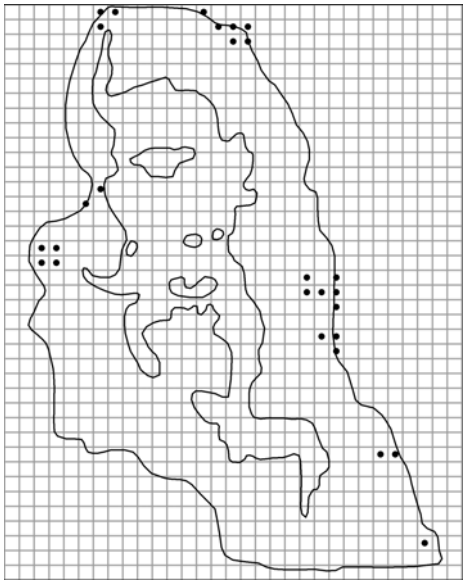
Sinapis arvensis



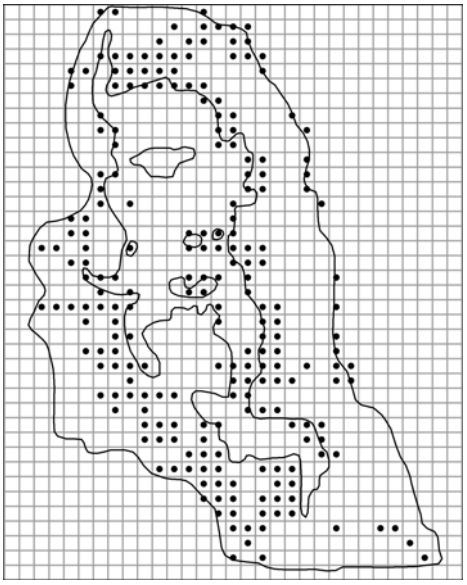
Sisymbrium altissimum



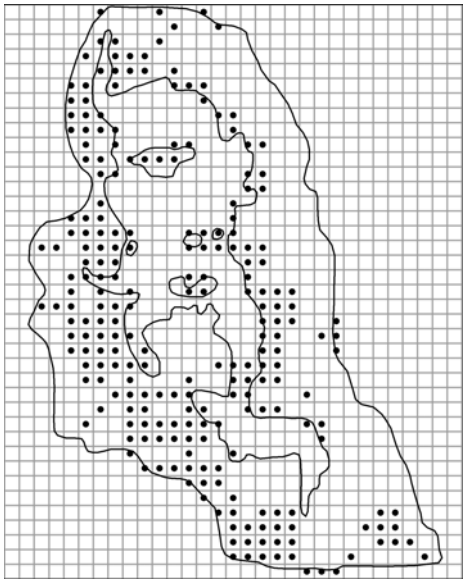
Sisymbrium loeselii



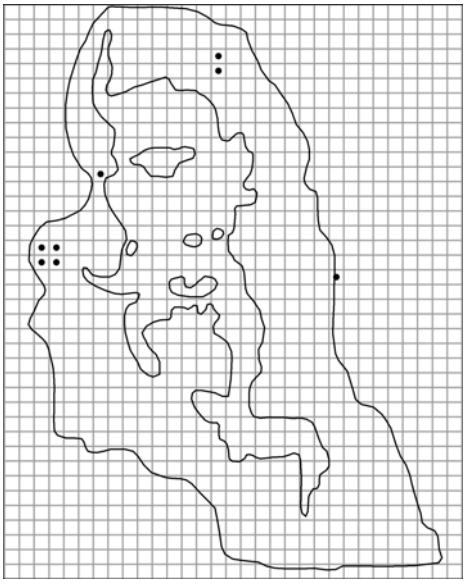
Sisymbrium officinale



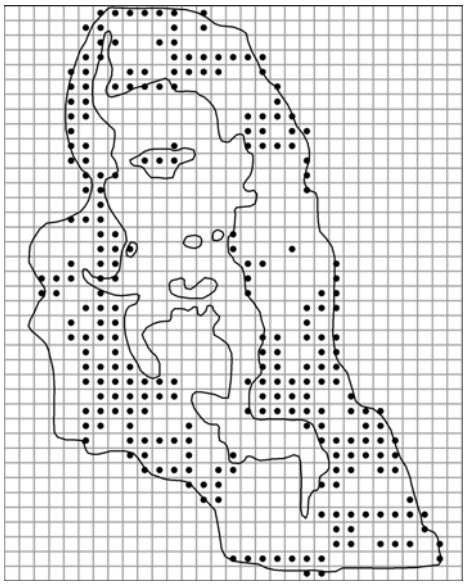
Sium latifolium



Solanum dulcamara



Solanum nigrum



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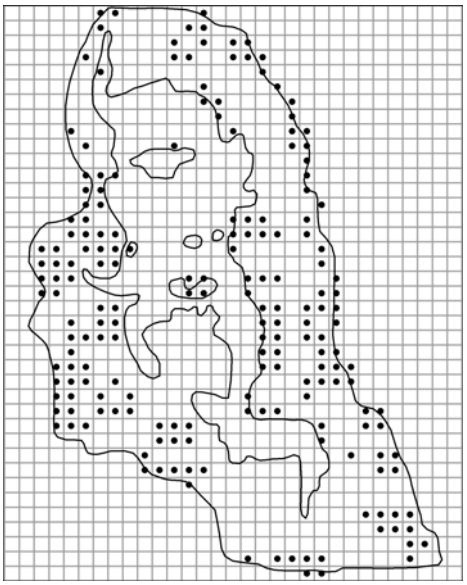
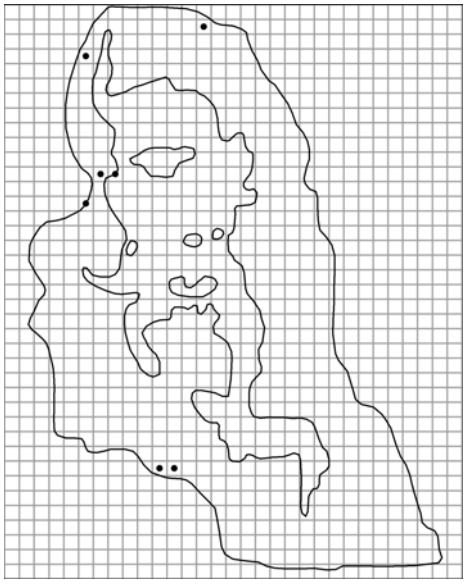
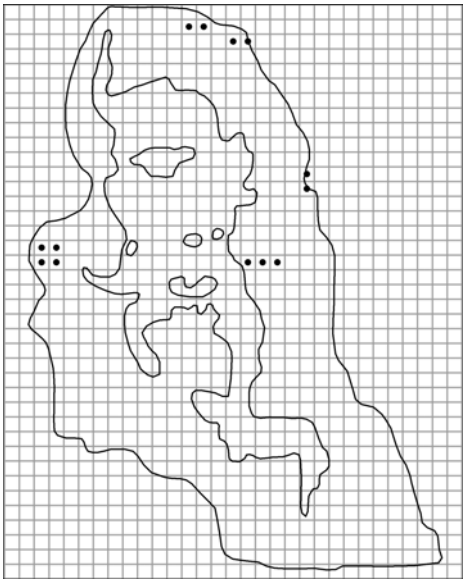


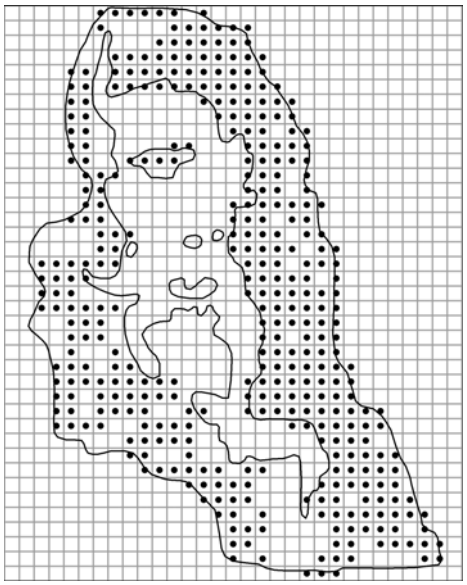
Sonchus arvensis



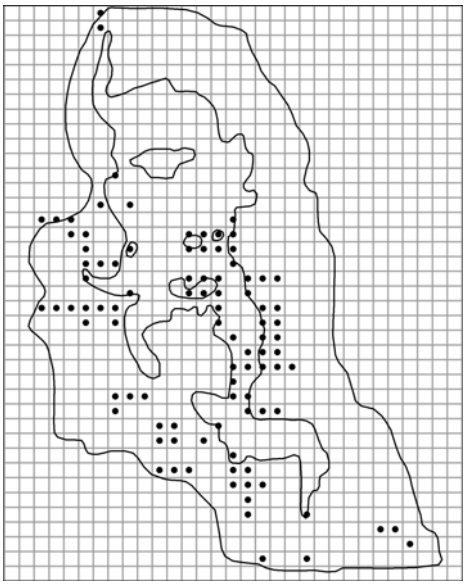
Sonchus asper



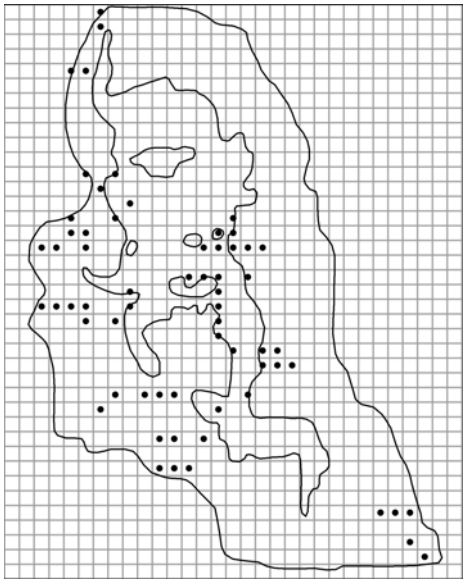
Sonchus oleraceus



Sorbus aucuparia



Sparganium emersum



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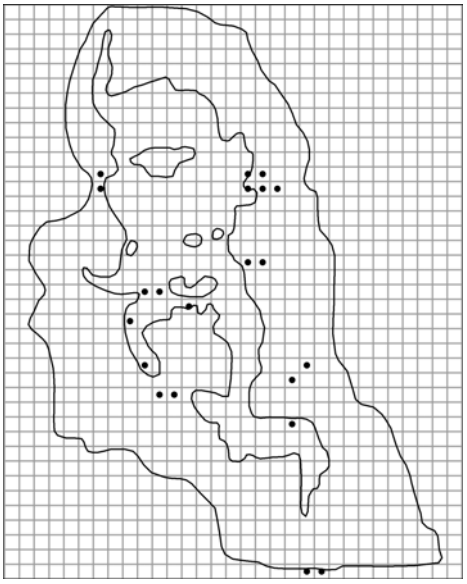
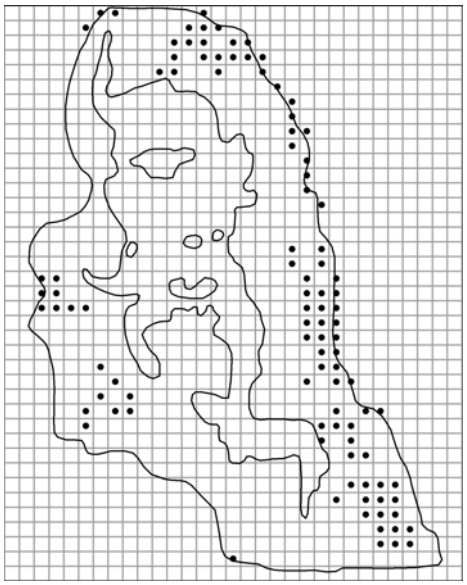
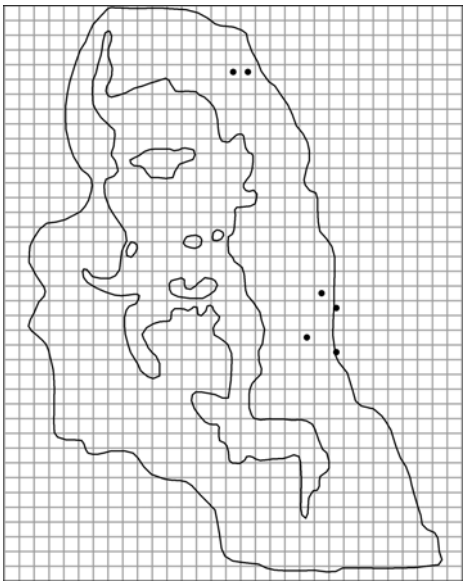


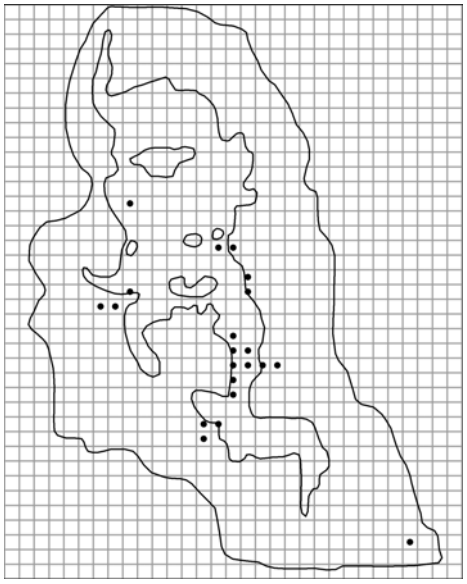
Sparganium minimum



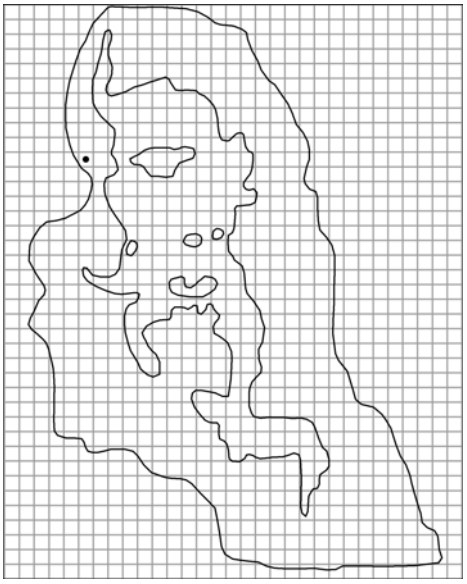
Spergula arvensis



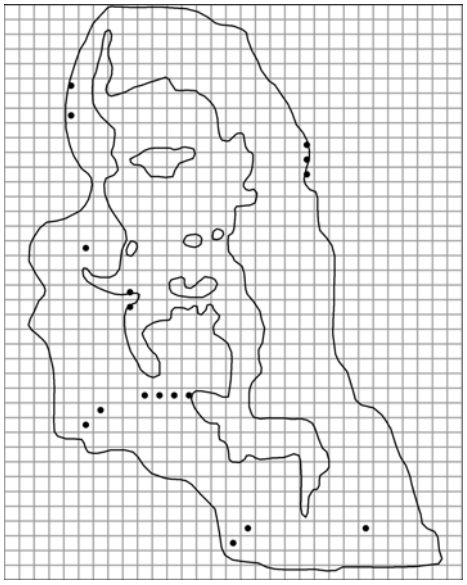
Spergularia rubra



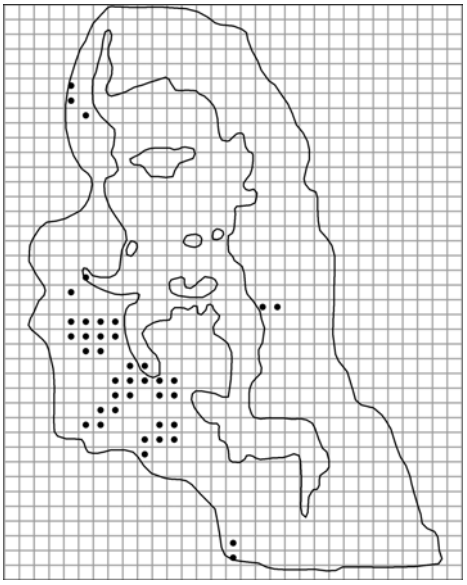
Spirodela polyrhiza



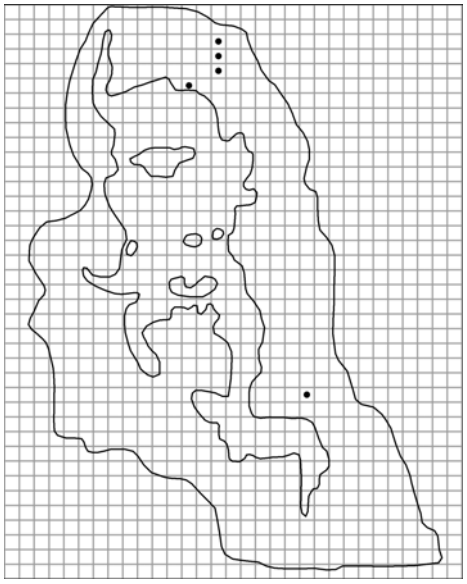
Stachys officinalis



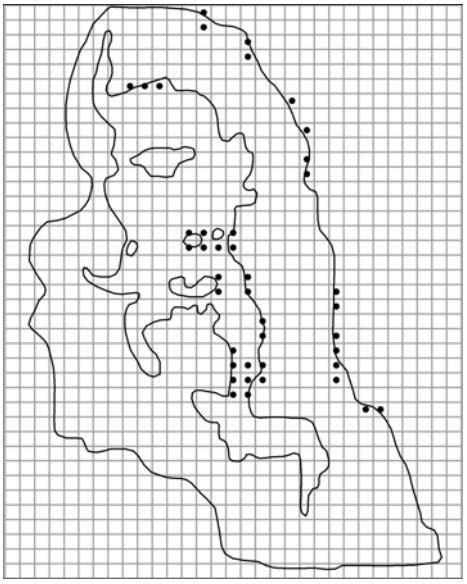
Stachys palustris



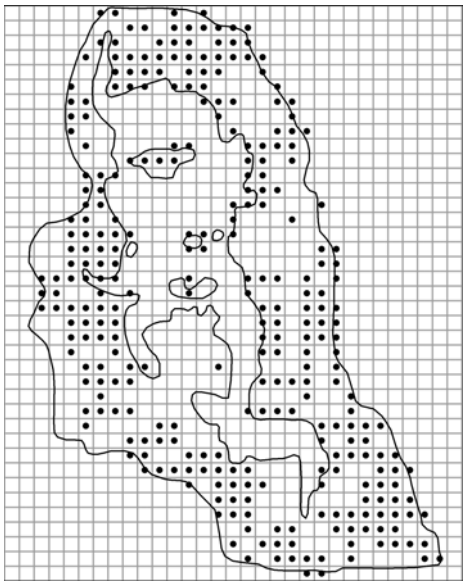
Stachys sylvatica



Stellaria alsine



Stellaria crassifolia



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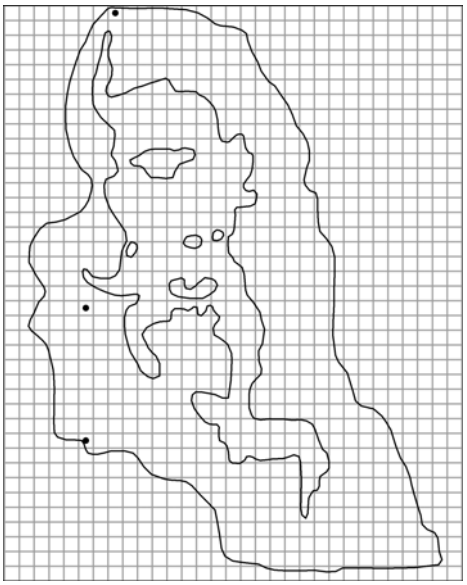

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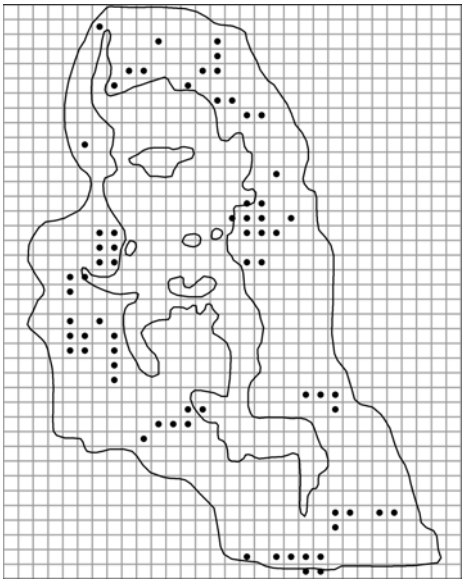
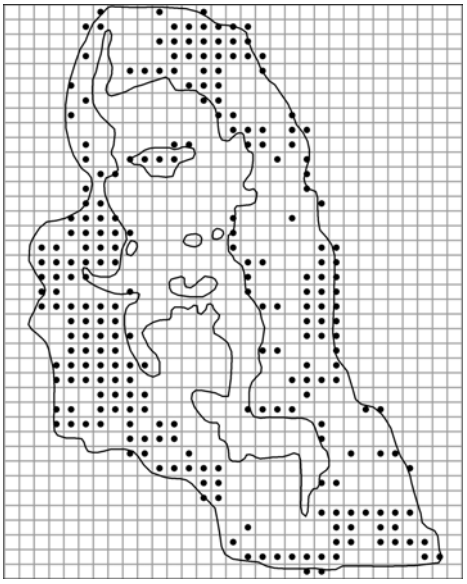
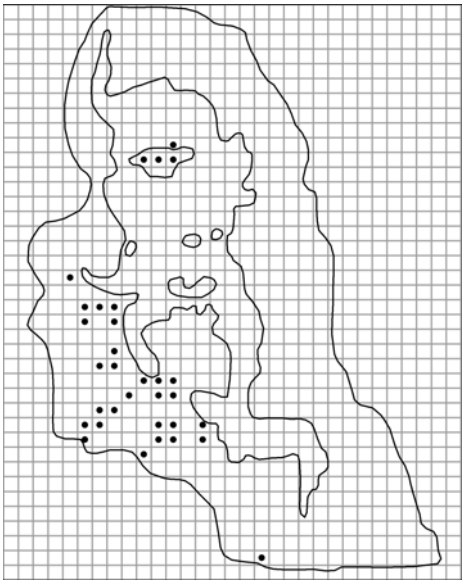


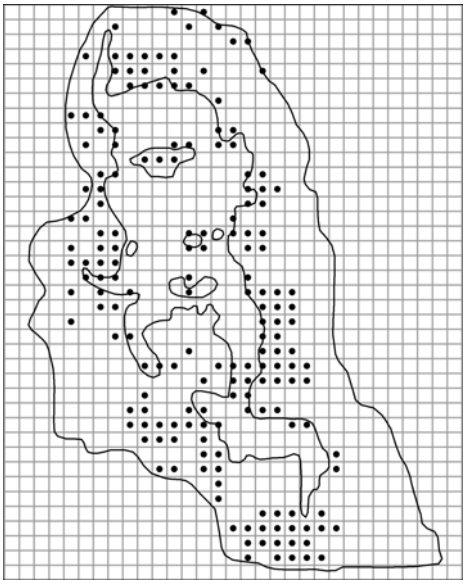
Stellaria longifolia



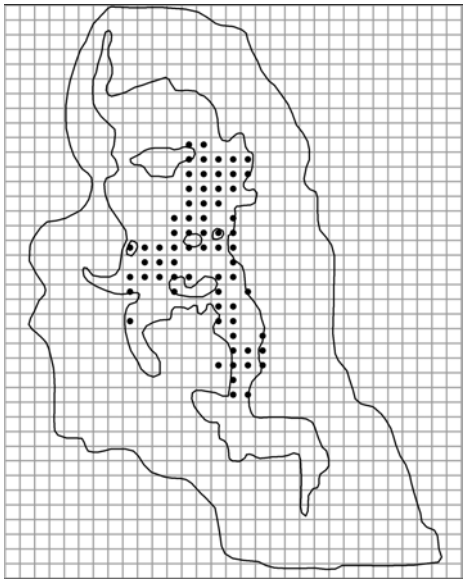
Stellaria media



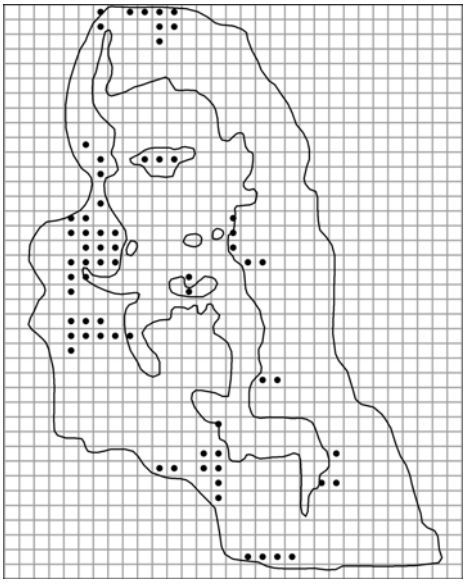
Stellaria nemorum



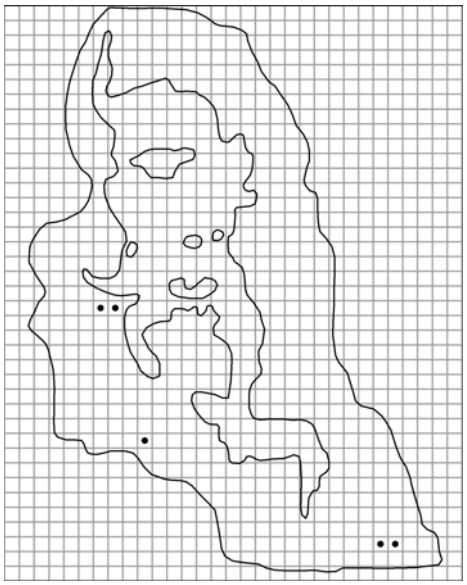
Stellaria palustris



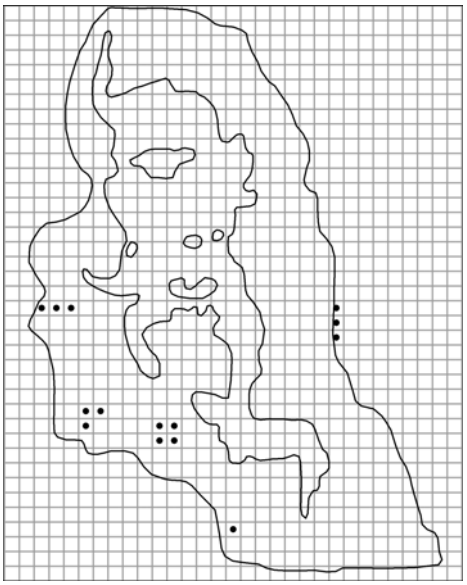
Stratiotes aloides



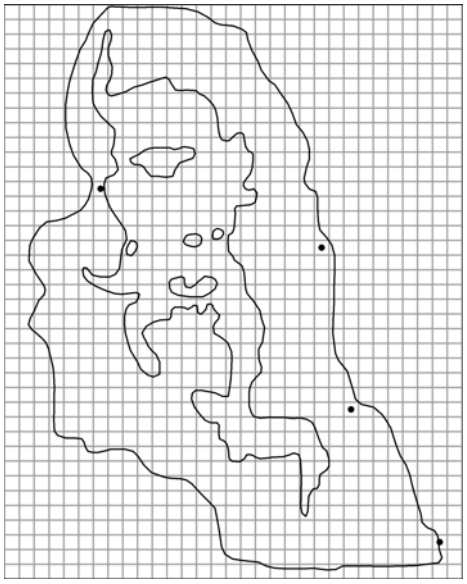
Succisa pratensis



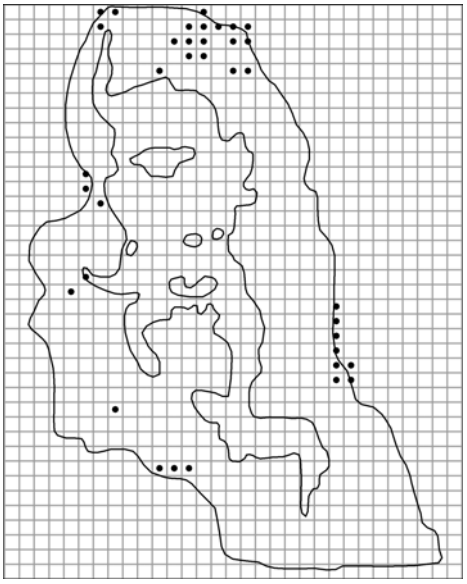
Swida alba



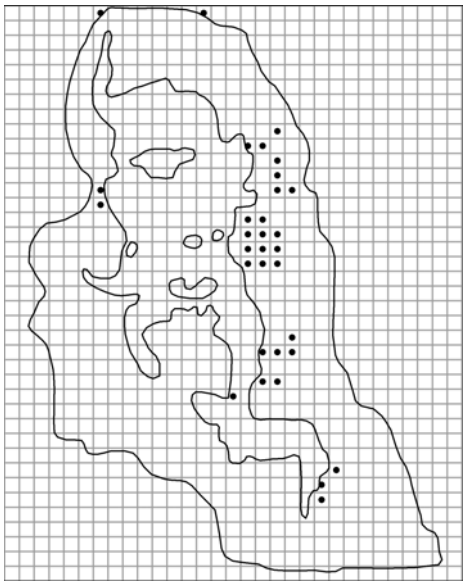
Symphytum officinale



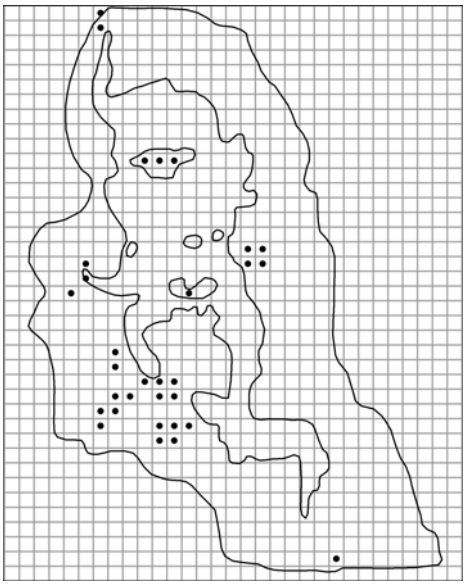
Syringa vulgaris



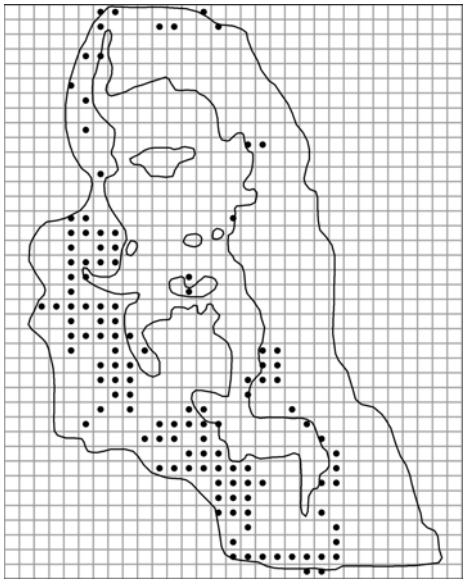
Tanacetum vulgare



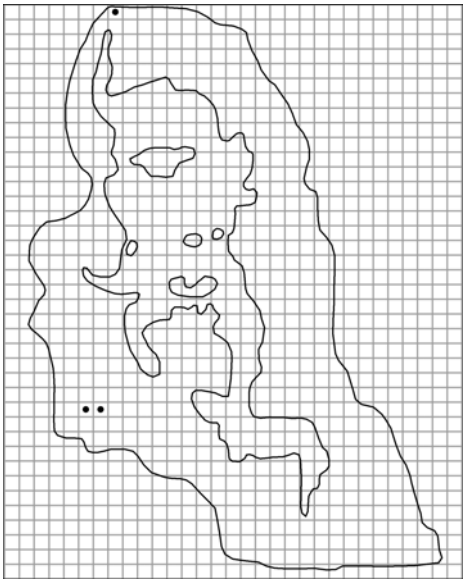
Taraxacum palustre



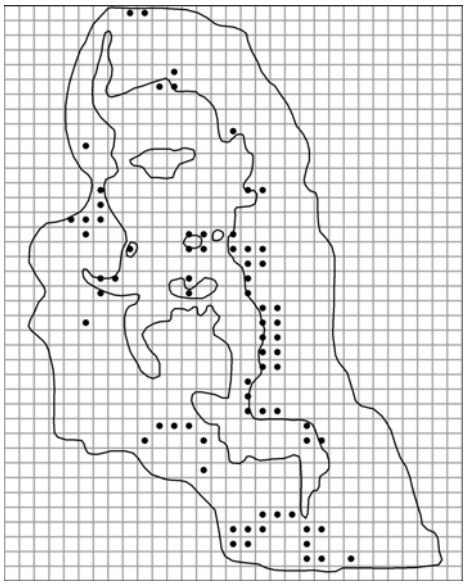
Thalictrum aquilegifolium



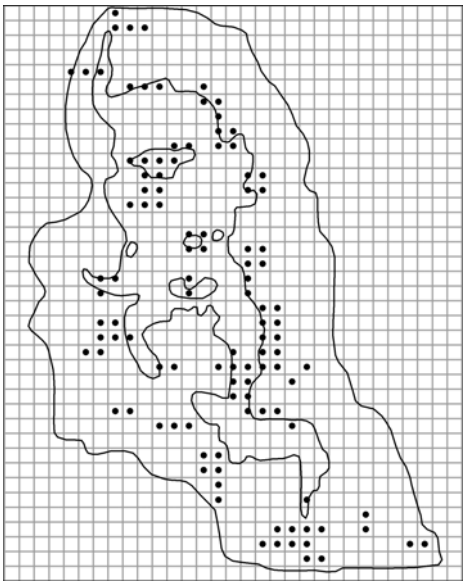
Thalictrum flavum



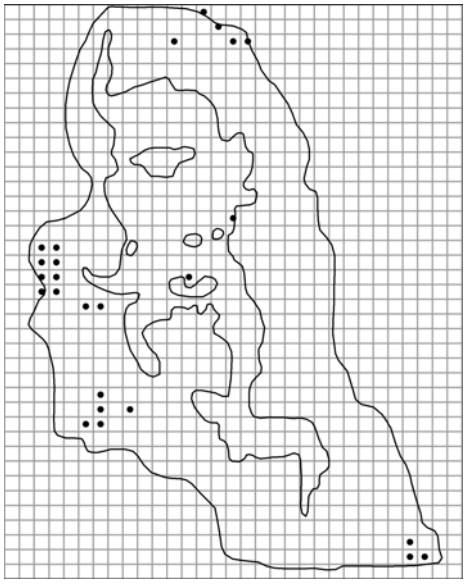
Thalictrum lucidum



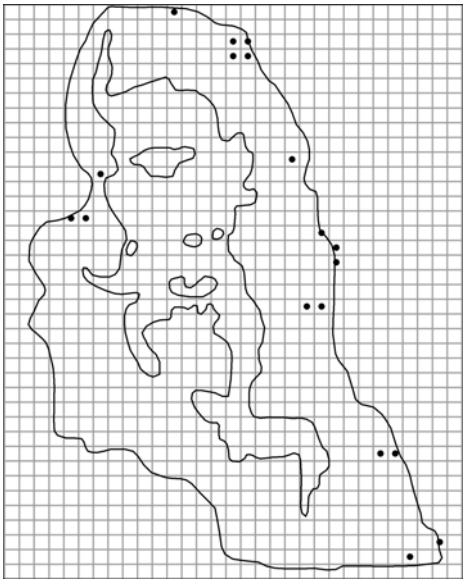
Thalictrum simplex



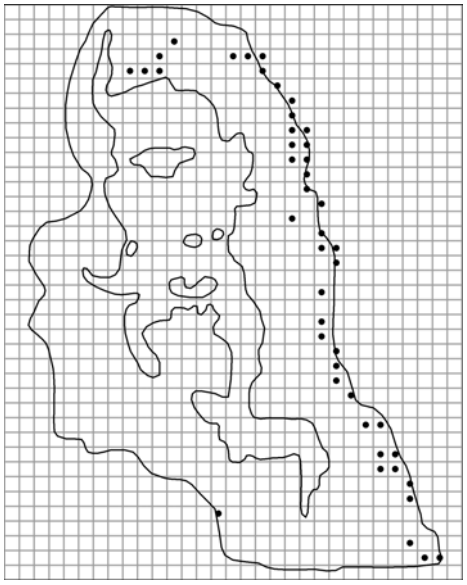
Thelypteris palustris



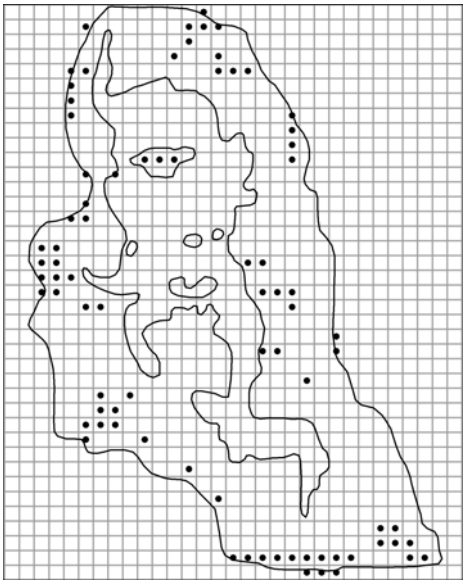
Thlaspi arvense



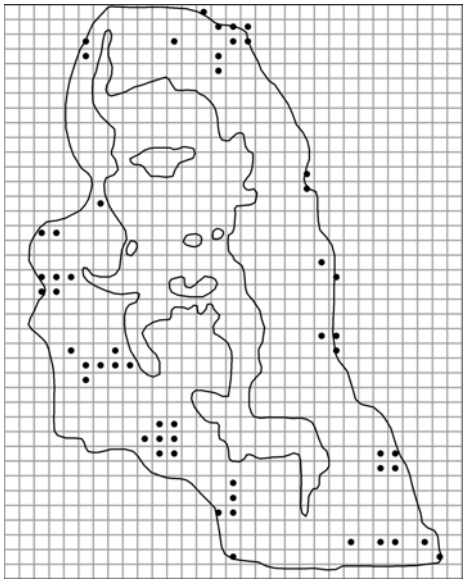
Thymus ovatus



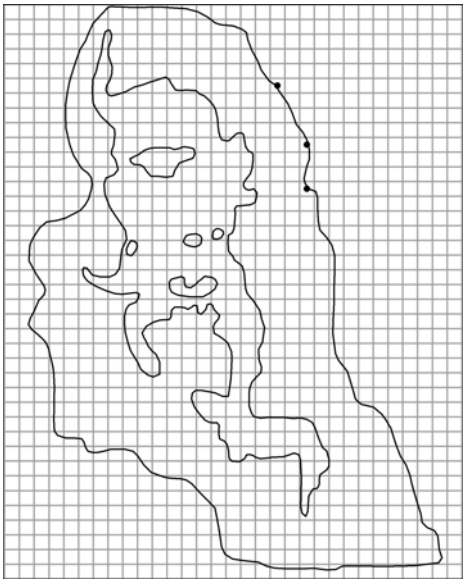
Thymus serpyllum



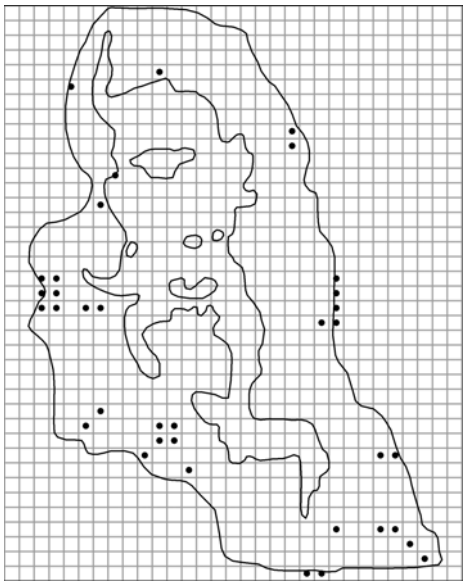
Tilia cordata



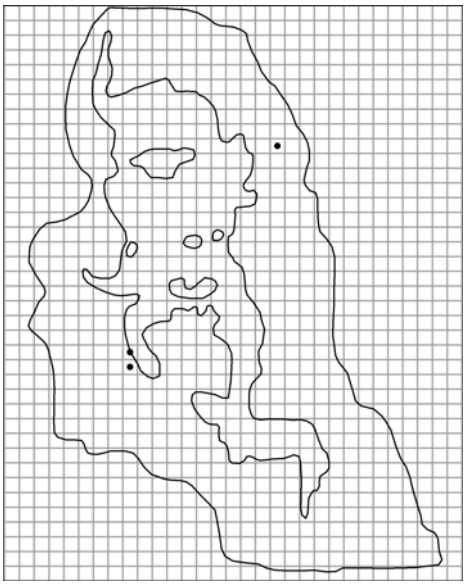
Torilis japonica



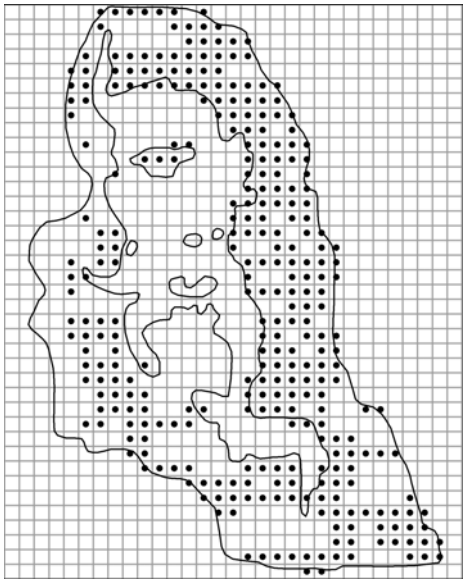
Tragopogon heterospermum



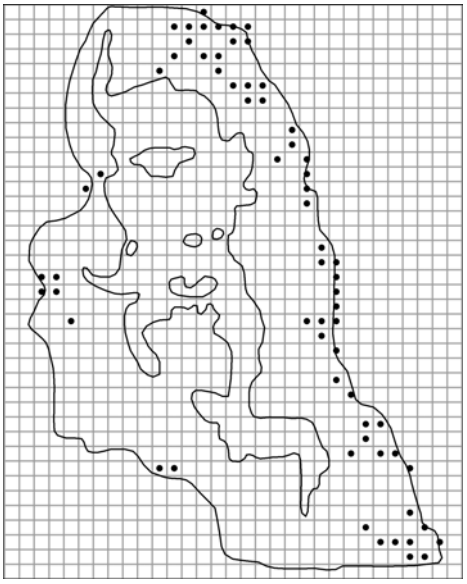
Tragopogon pratensis



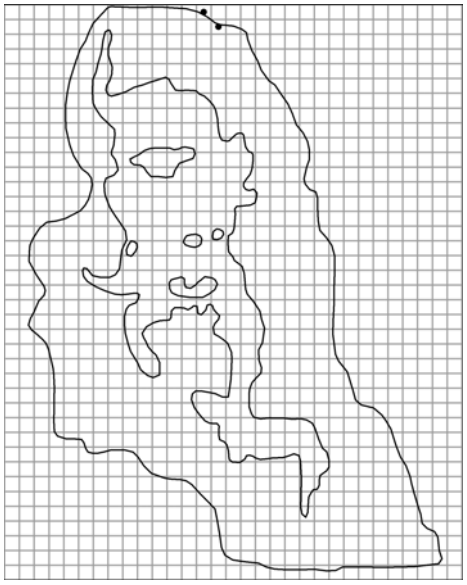
Trichophorum alpinum



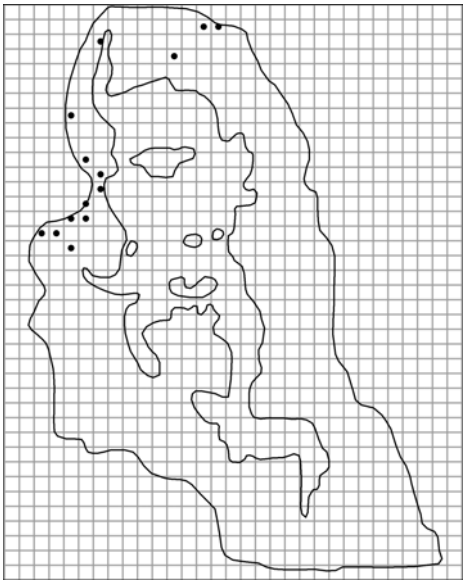
Trientalis europaea



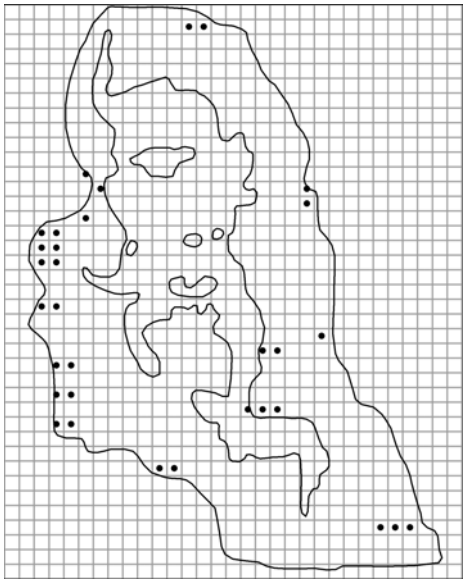
Trifolium arvense



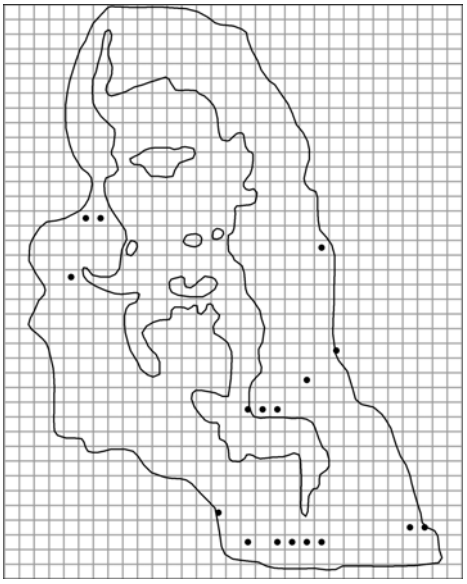
Trifolium campestre



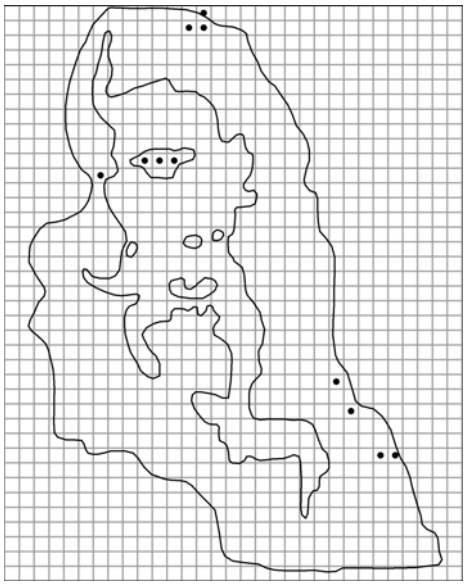
Trifolium dubium



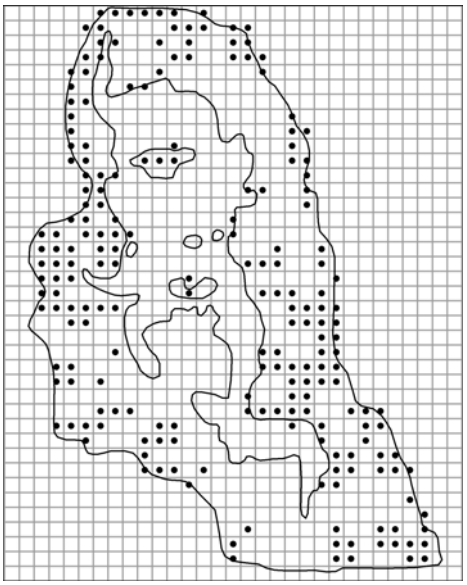
Trifolium hybridum



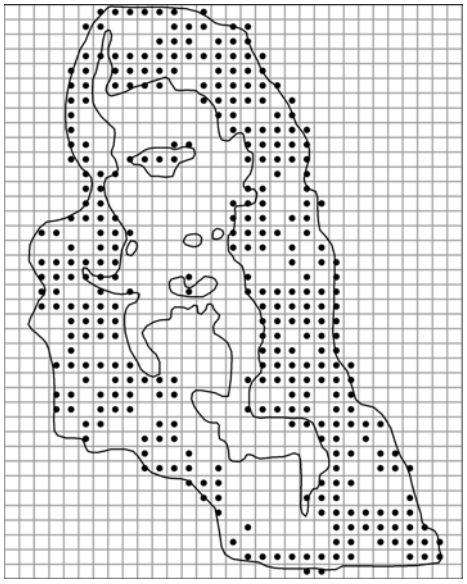
Trifolium medium



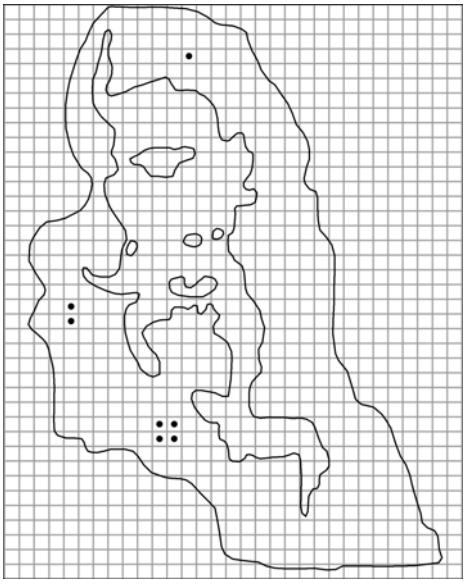
Trifolium montanum



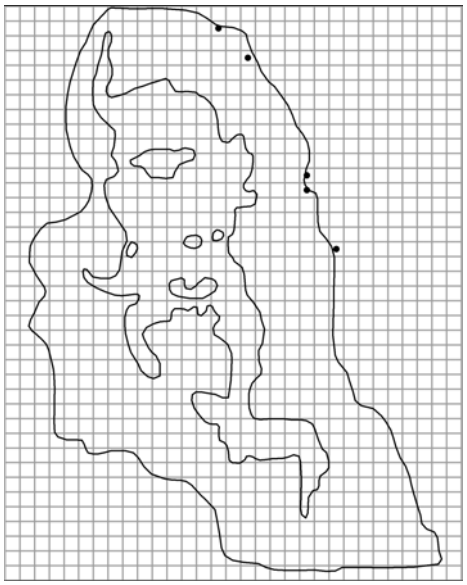
Trifolium pratense



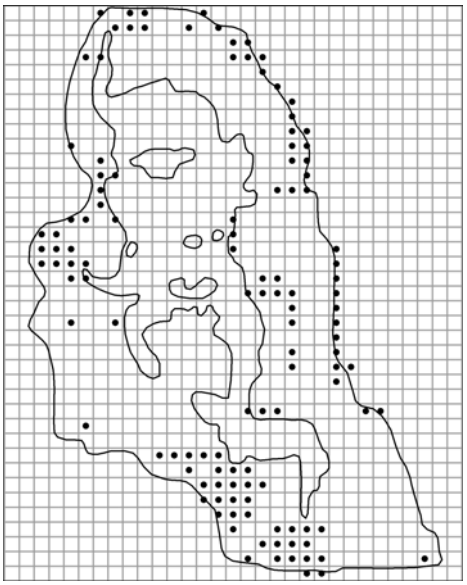
Trifolium repens



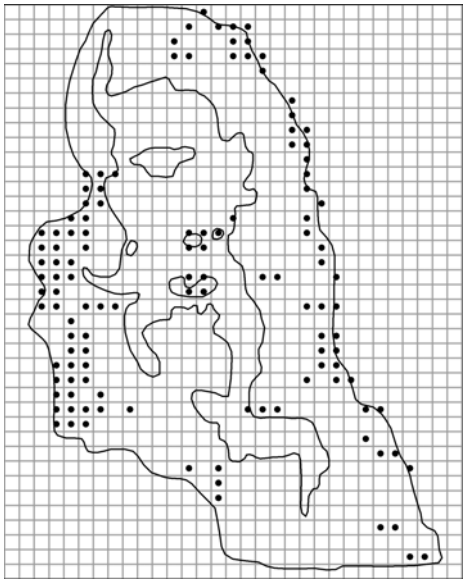
Trifolium spadiceum



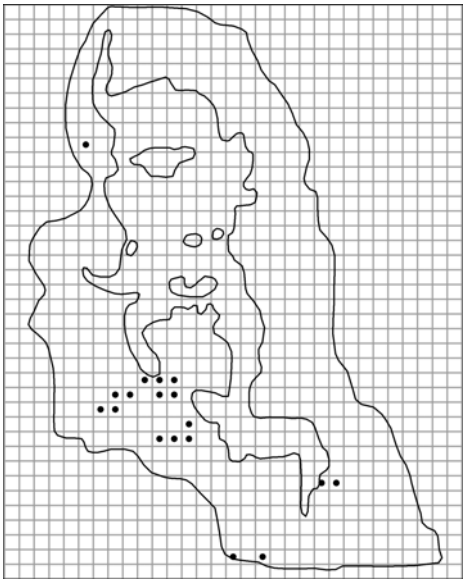
Triglochin maritimum



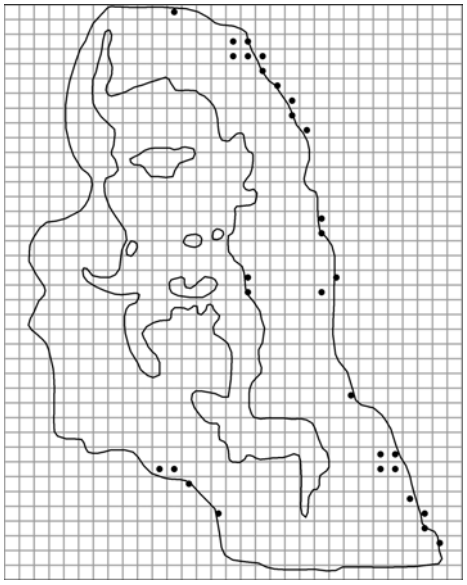
Triglochin palustre



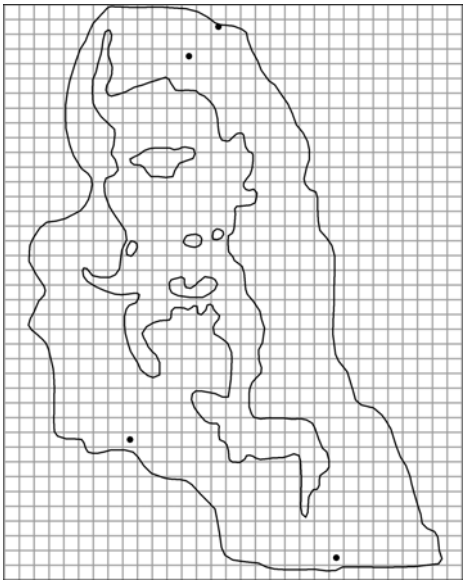
Tripleurospermum perforatum



Trollius europaeus



Trommsdorfia maculata



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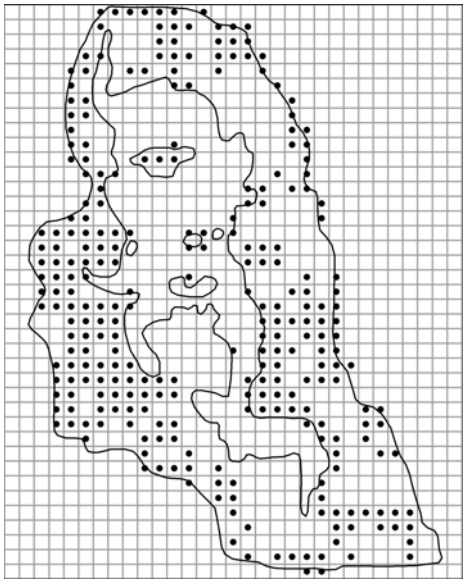

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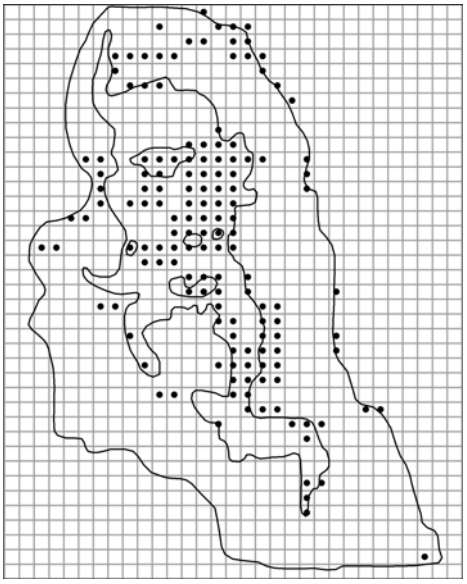

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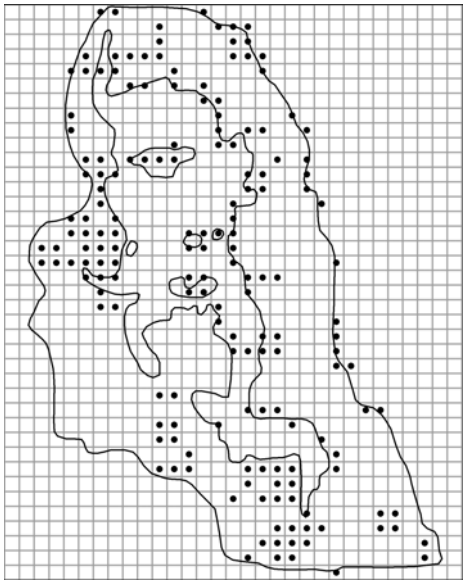

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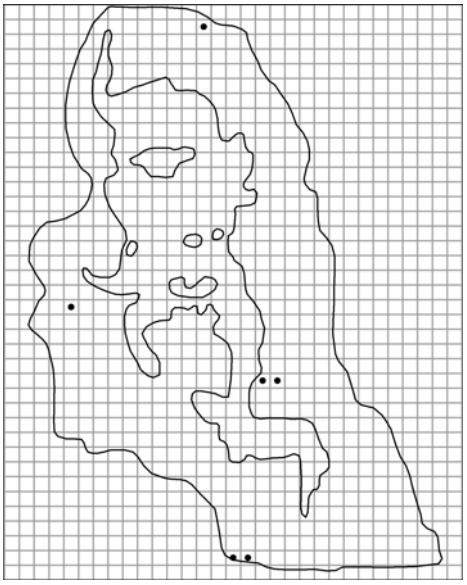

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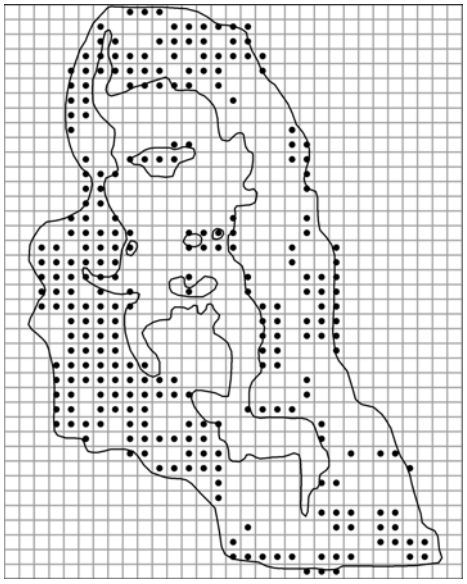

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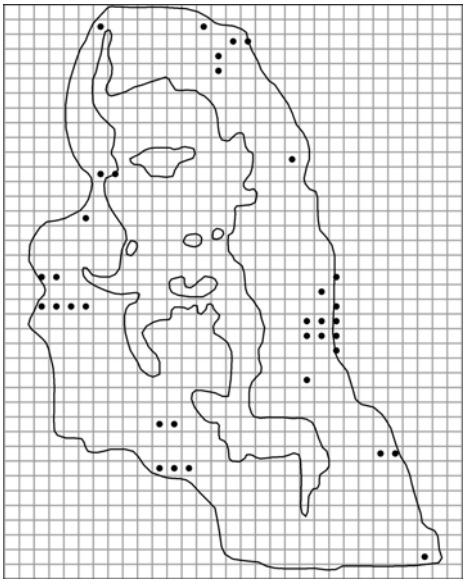

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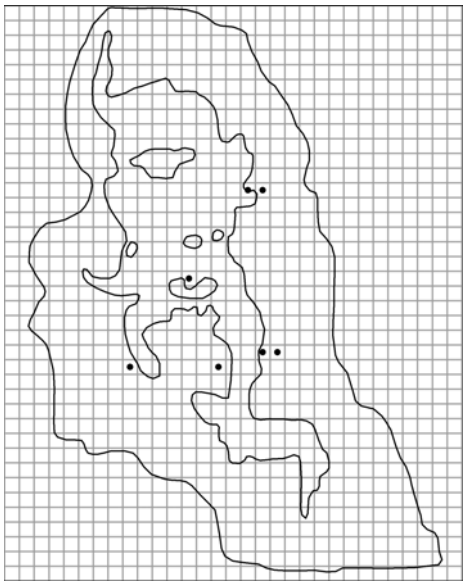
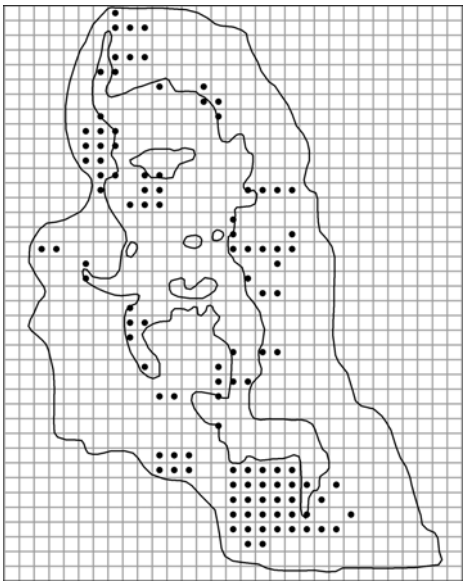


Utricularia australis



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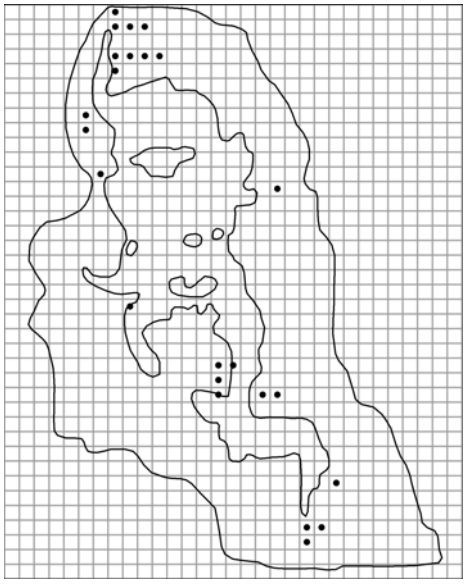

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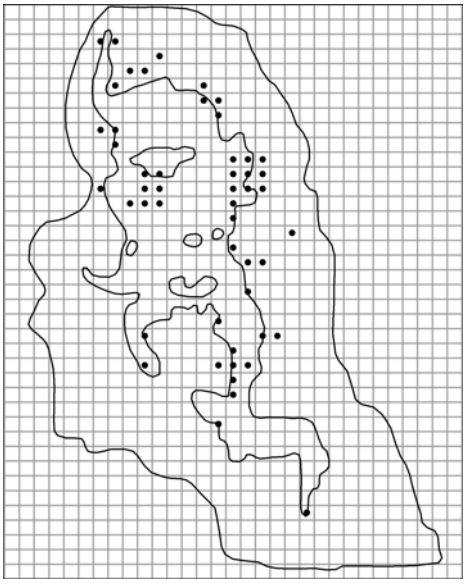

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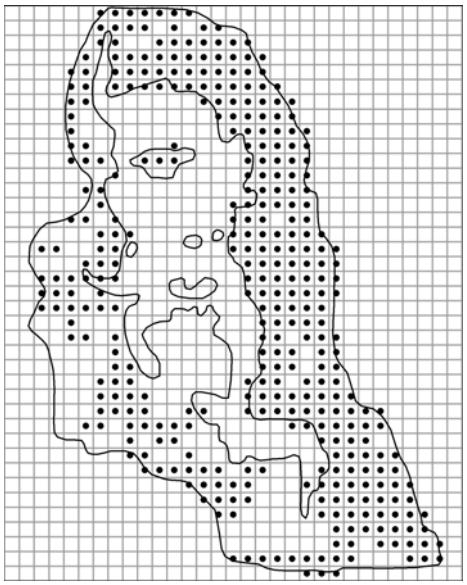

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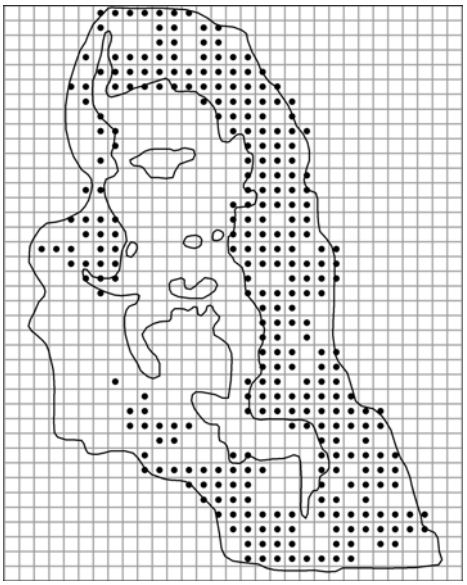

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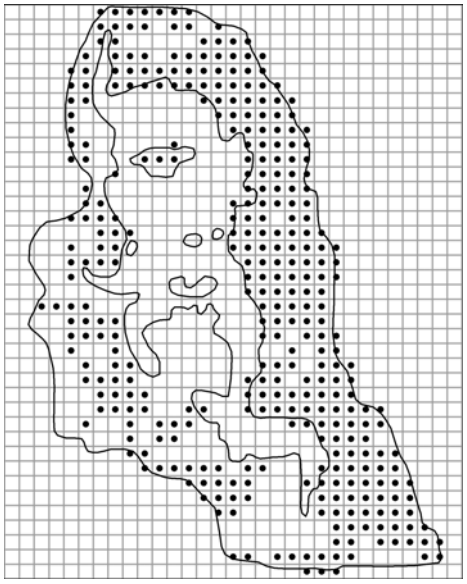

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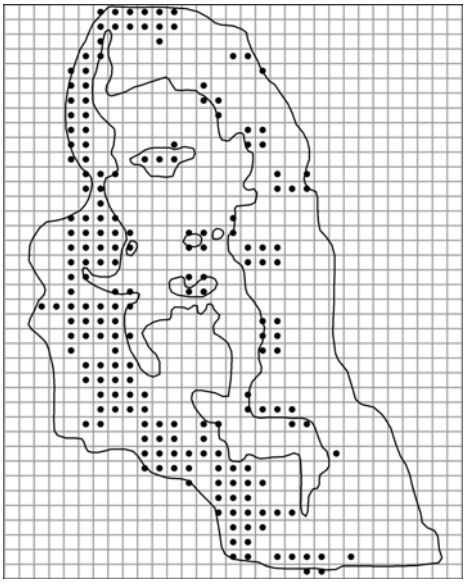
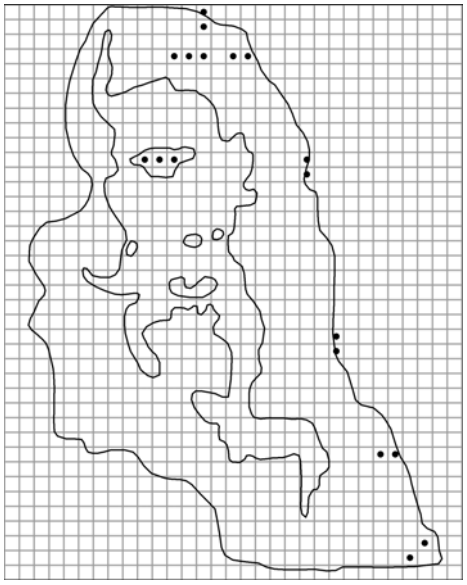


Valeriana officinalis



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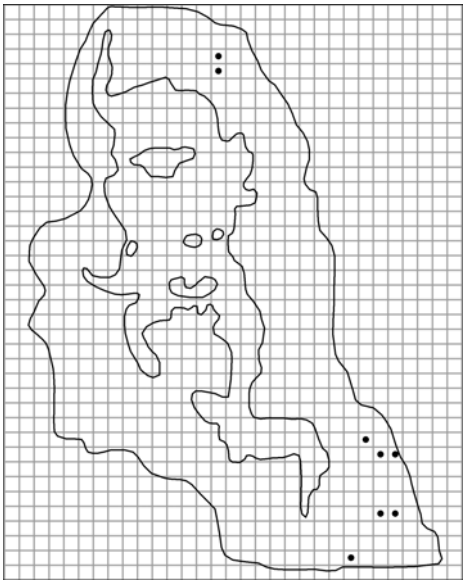

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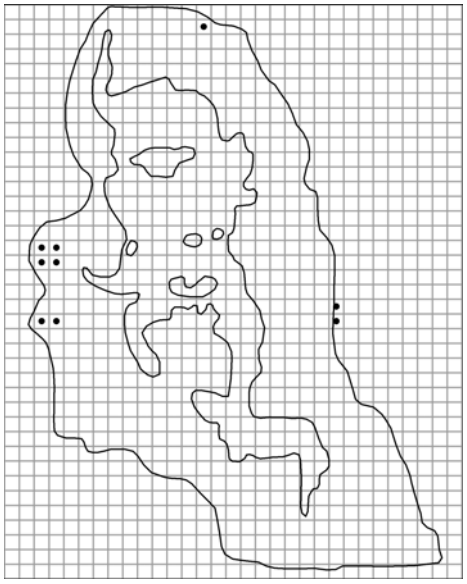
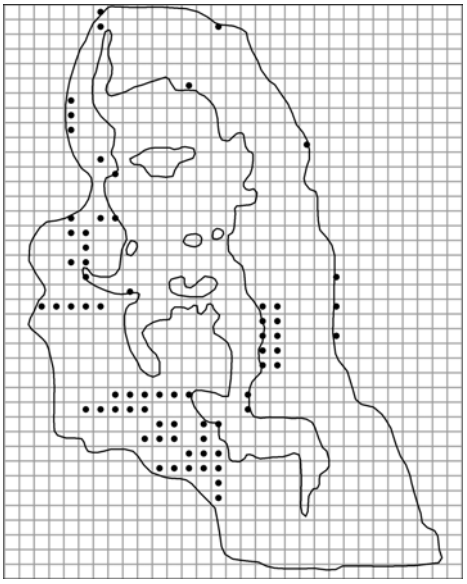


Veronica agrestis



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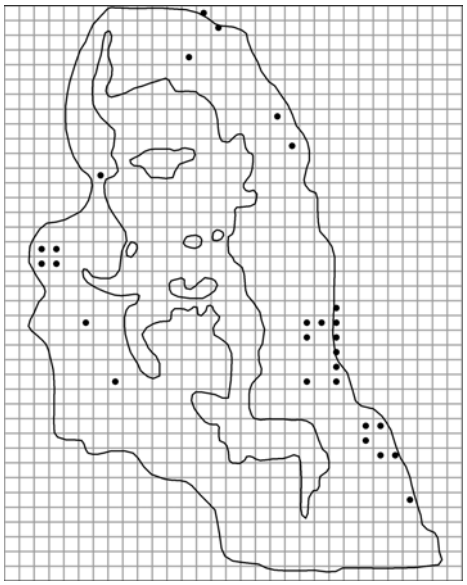

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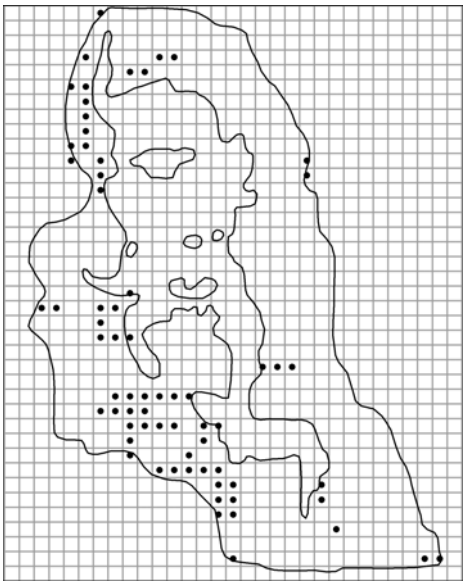

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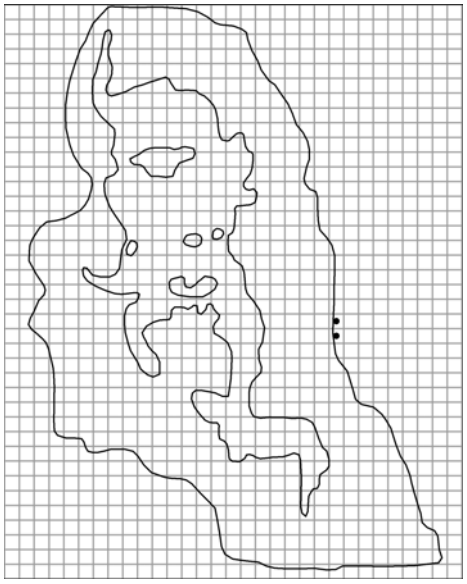

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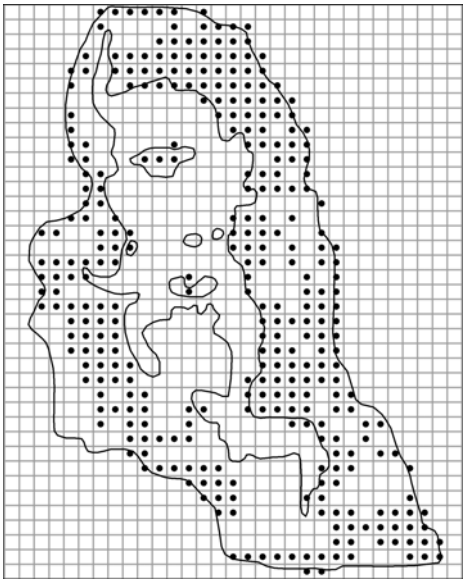

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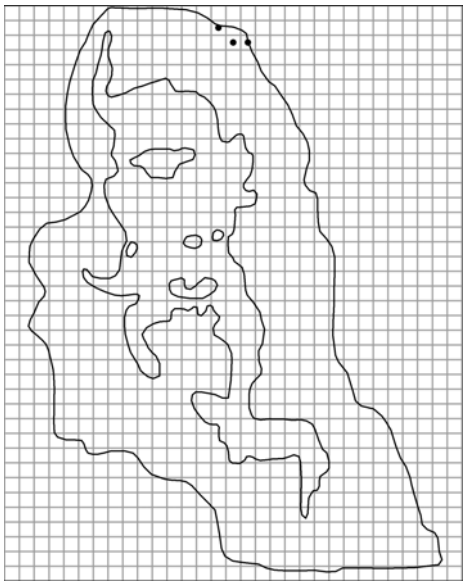

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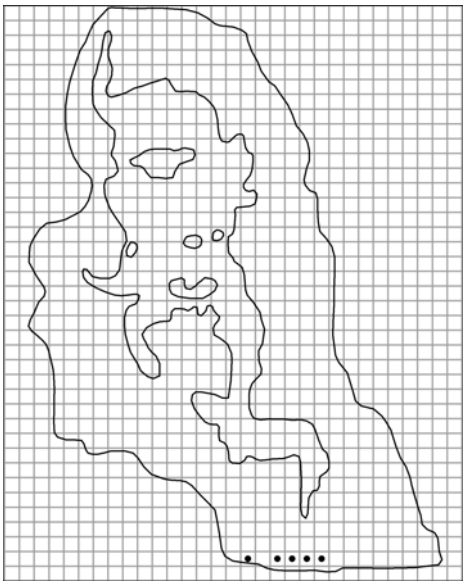

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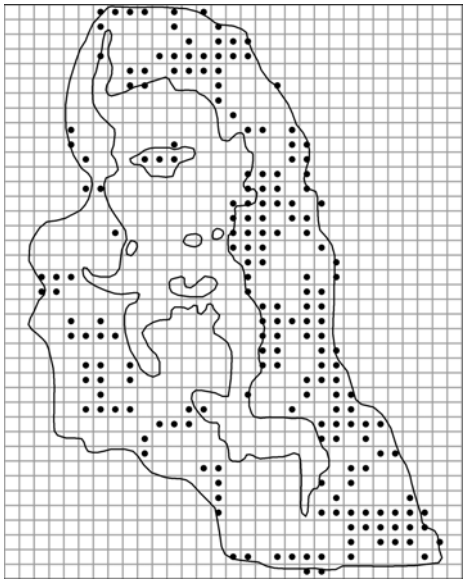

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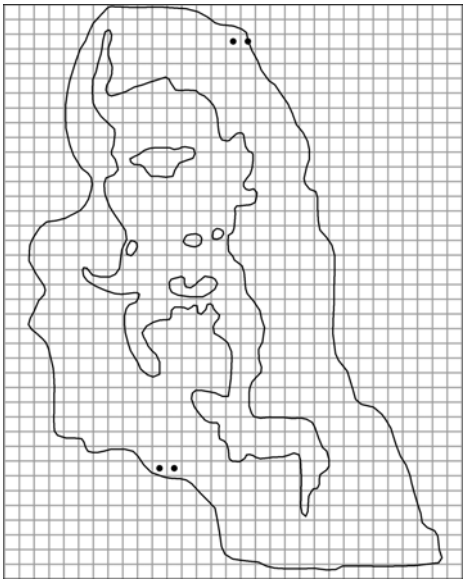

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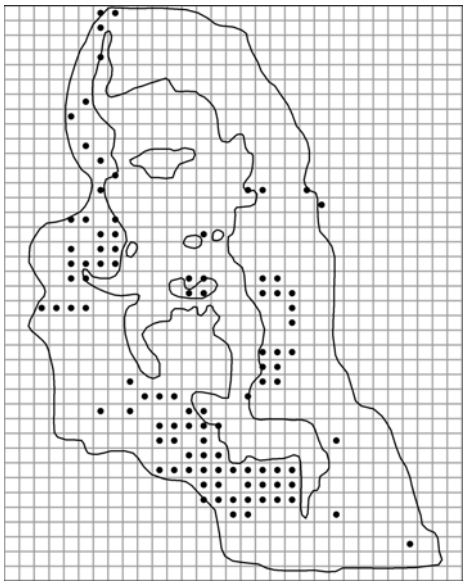

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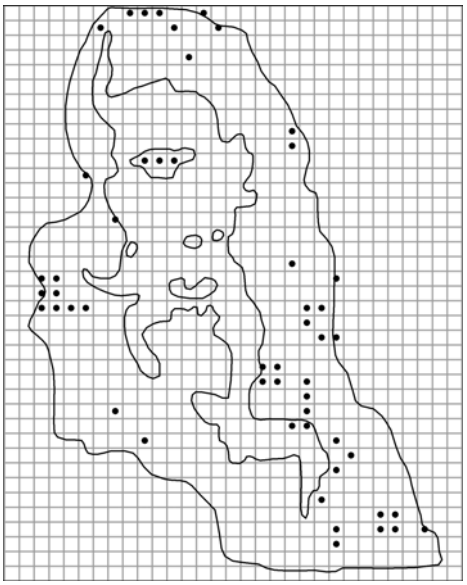

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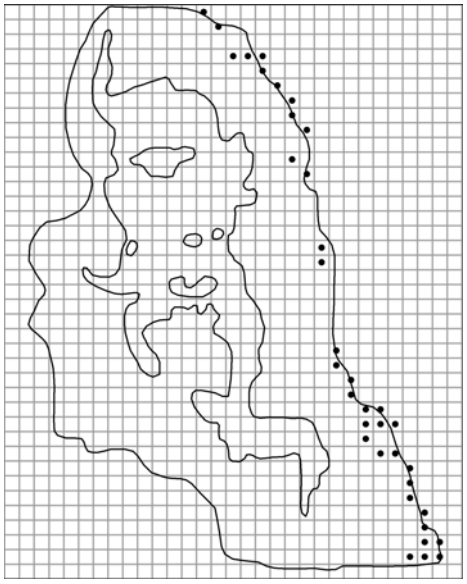

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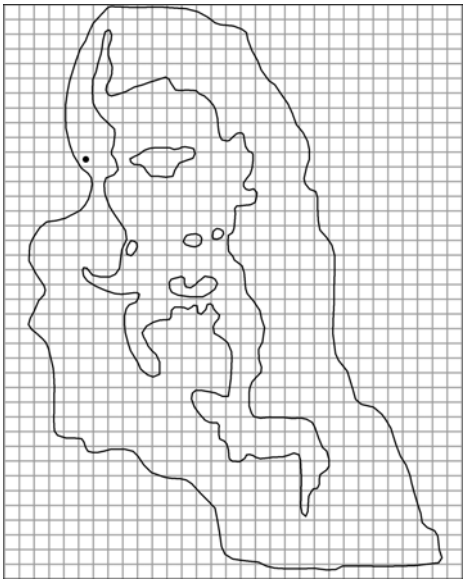

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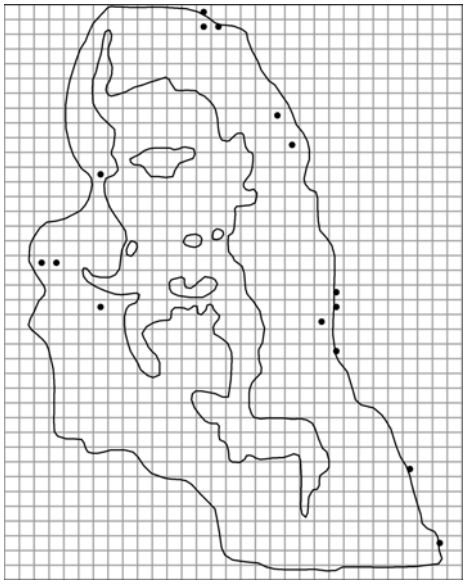

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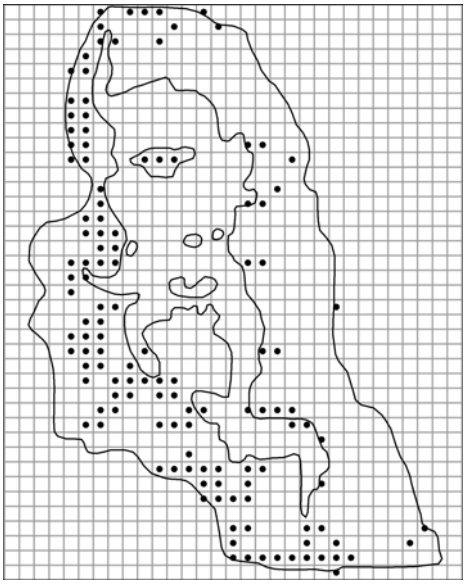

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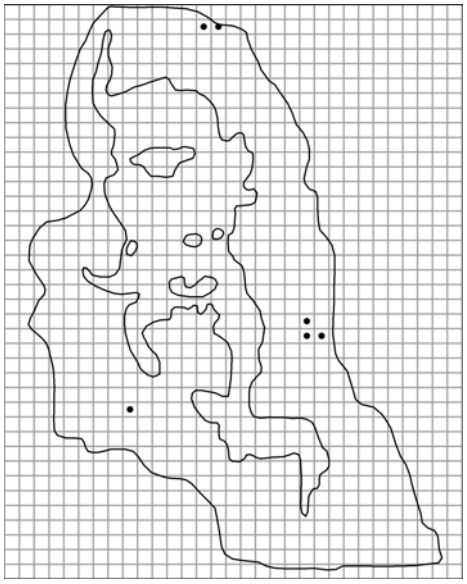

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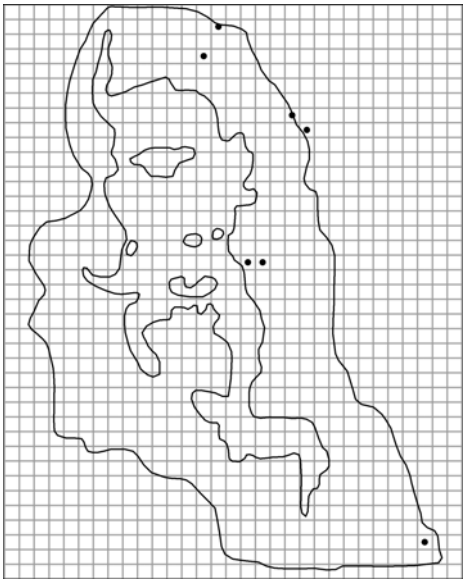

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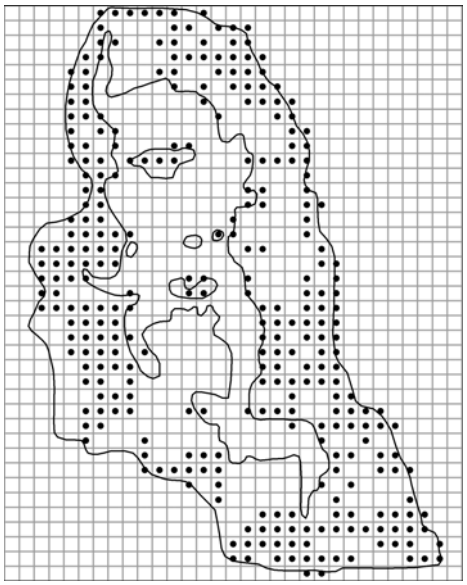

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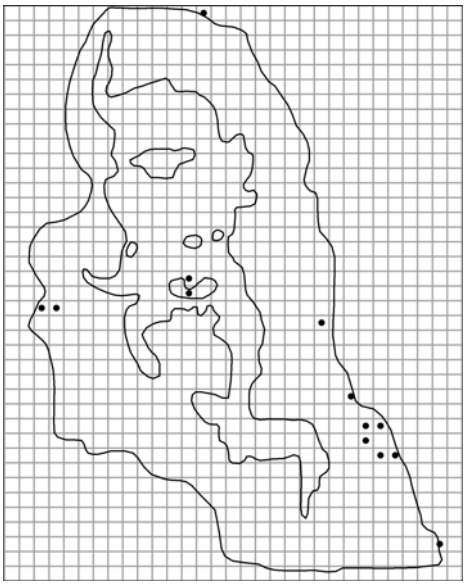

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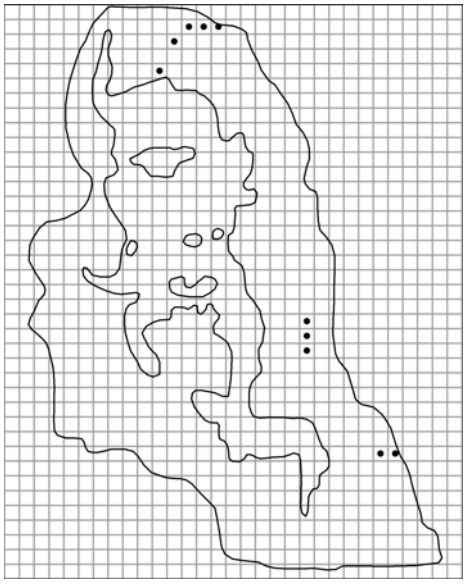

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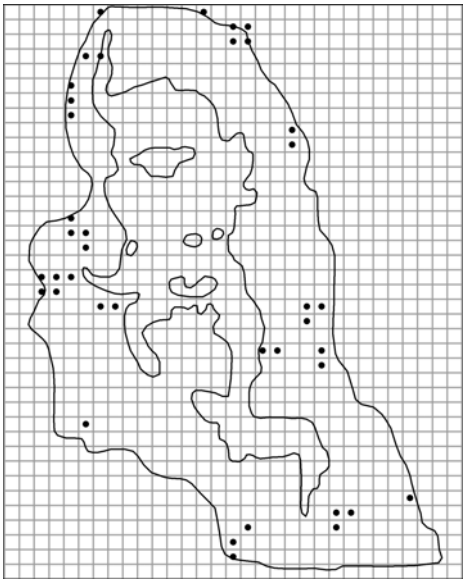

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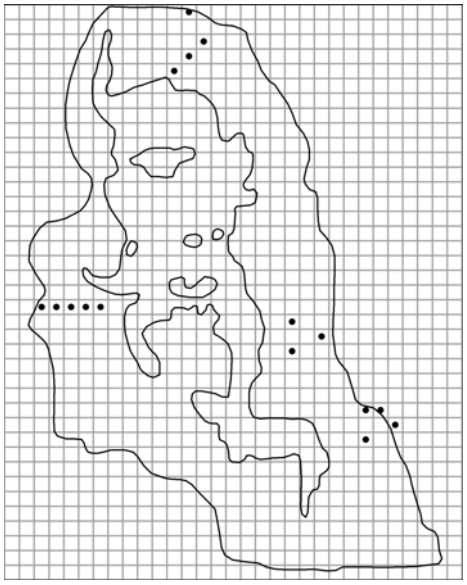

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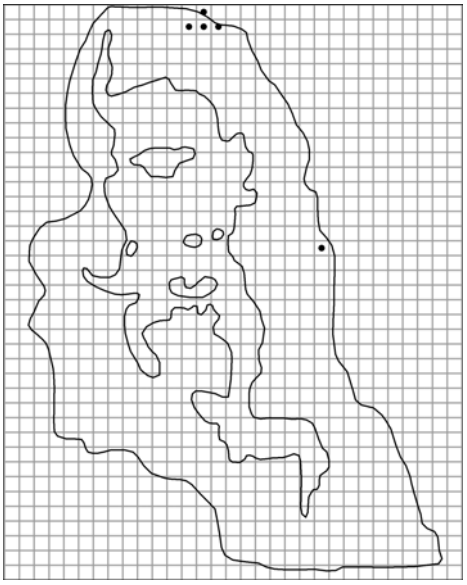

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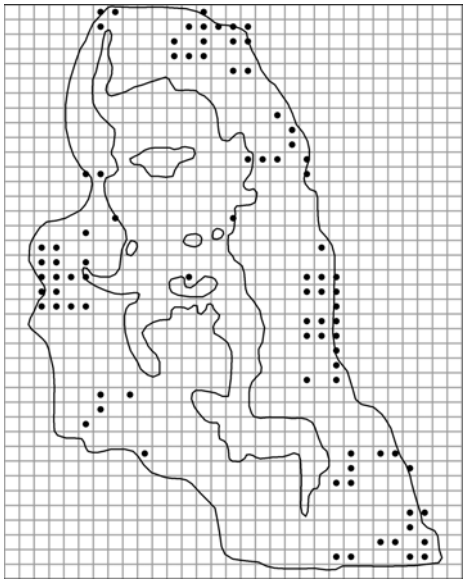
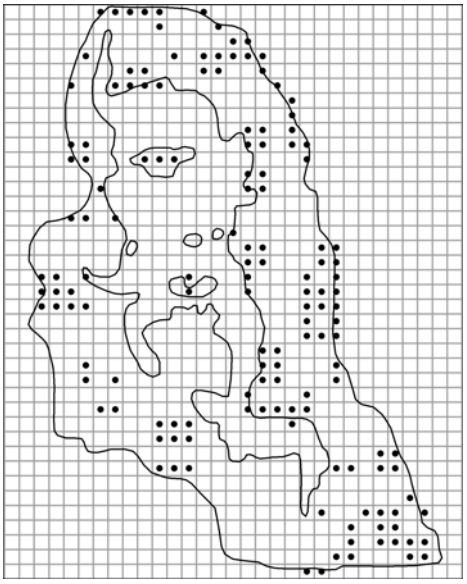


Viola arvensis



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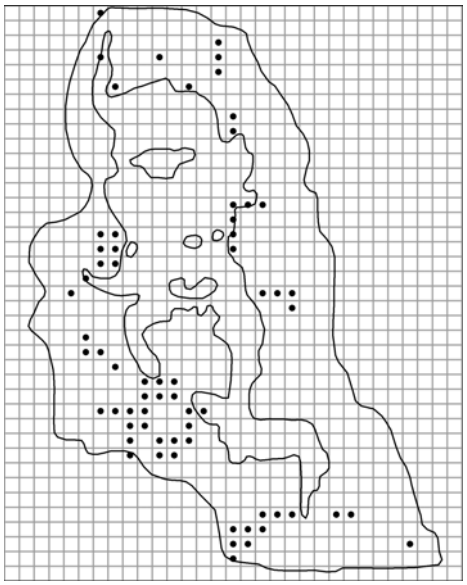

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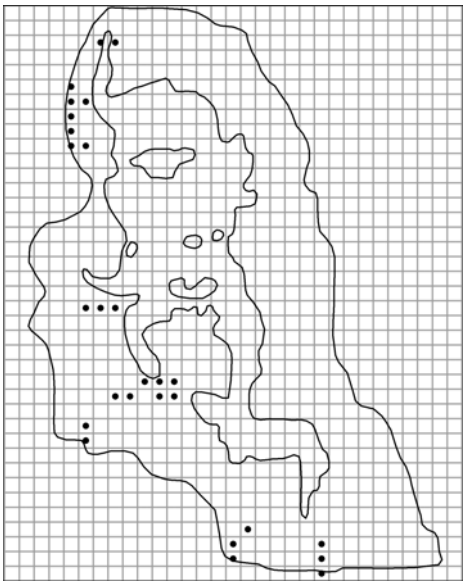

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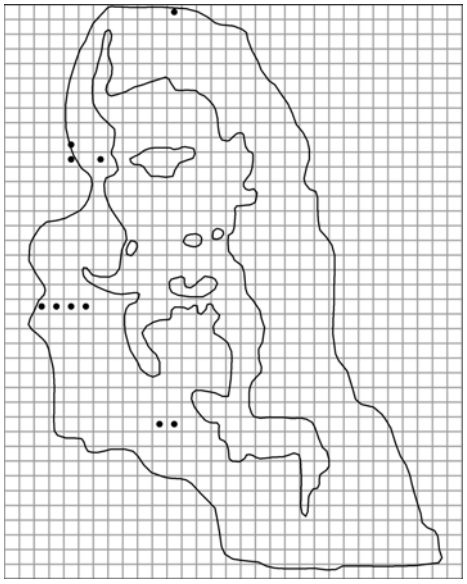

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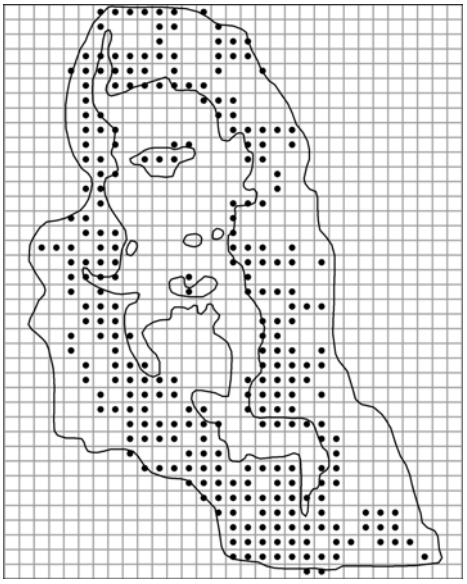
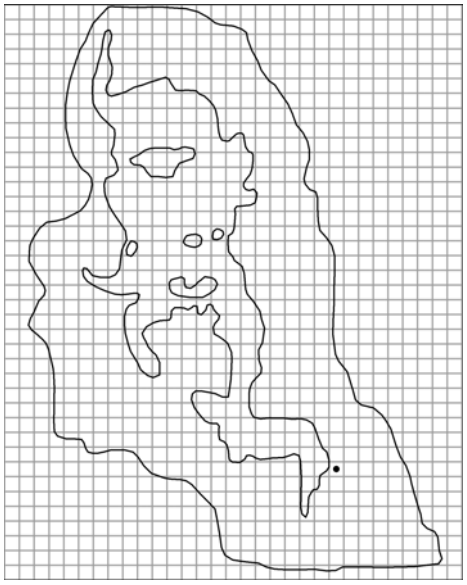
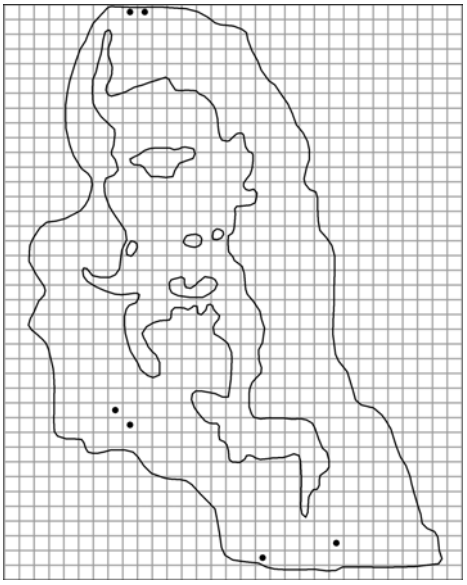


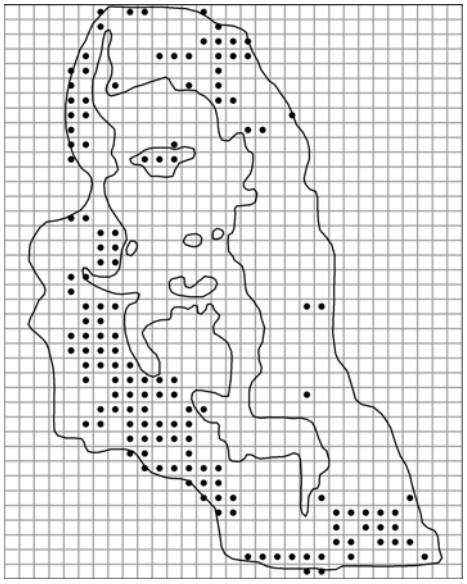
Viola palustris



Viola persicifolia



Viola reichenbachiana



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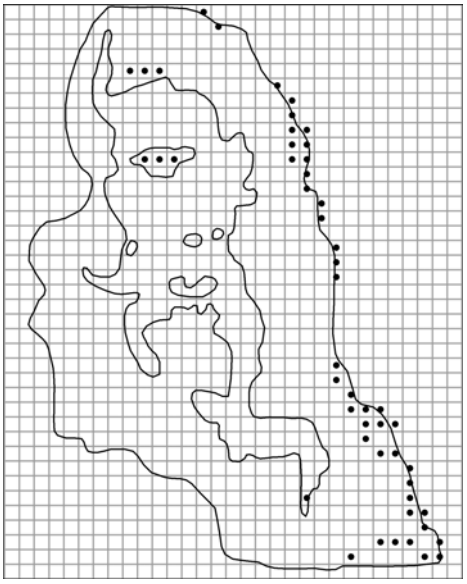

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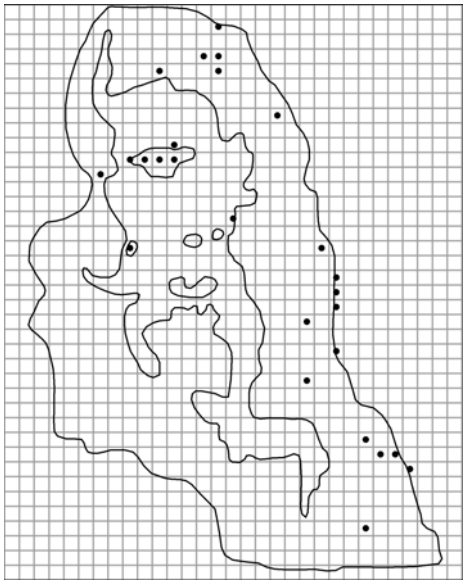
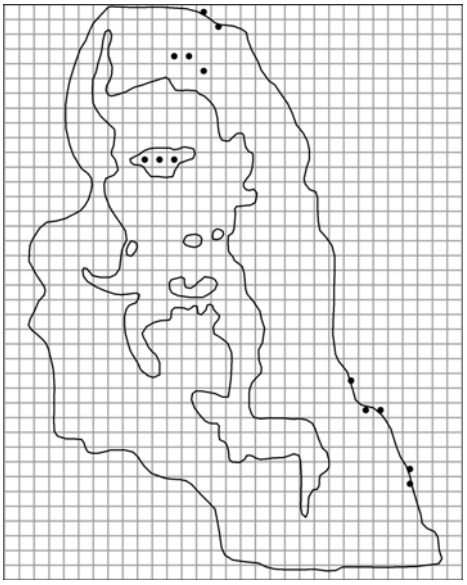
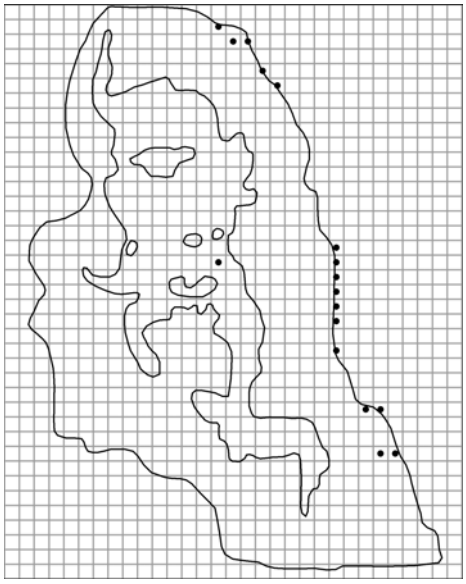


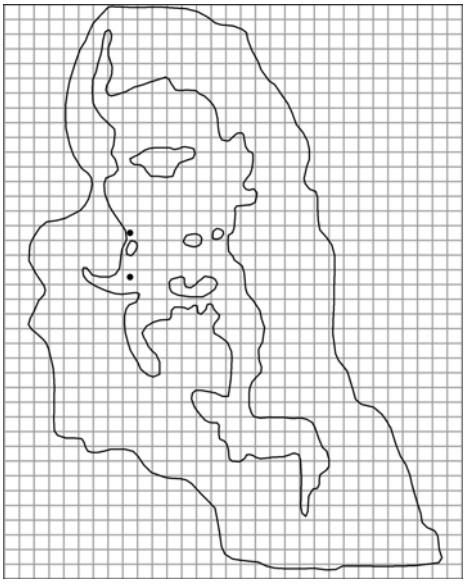
Viola tricolor



Viscaria vulgaris



Zannichellia palustris



Zizania aquatica