

Summary Data for Grizzly Bear and other Ecology Plots

Database	Plot Nos.	No. Recs in GRZSTAND	Notes
GRZ-P86	1-237	237	
GRZ-G88	300-355, 357-369, 400-764, 781-808, 820-828, 836, 900-939, 1000-1102, 1106-1199	479	
GRZ-G89	240-250, 356, 370-399, 780, 809-819, 829-835, 844-899, 942-999, 1104-1105, 1200-1261, 1300-1519, 1600-1697, 1800-1897, 3000-3039	555	559 originally
GRZ-G90	1264-1299, 1522-1575, 1698-1756	147	
GRZ-GCC	7901-7913	13	14 originally
MBS	12004-15661 (16459?)	2158	
WEN	2001-8011	679	
OKA (WES)	4001-5217	445	
NOCA	1000-8024 (505 with locations)	0	
TOTAL		4713	

* Grizzly Bear year data is from grzstand.db->ord1 (1431 plots total)

The sum of all ecology plots by year is as follows:

Database	No. plots
Grzstand	1431
GRZSPALL.DB	1431
GRZASSO.DB	1436
GRZDIST	1435
ALLPLOTS.AGR	3324
EXTG.ALL	5023

Database	Plot Nos. in ALLPLOTS.AGR DB	Sum	Nos. with locations	Sum
GRZ	GRZ1-2000	1687	1-1687	1687
GRZ	GRZ3000-3039	40	3000-3039	40
GRZ	GRZ7900-7913	14	7900-7913	14
MBS	MBS12004-15661 (16459?)	971	12405-16374	506
WEN	WEN2001-2673	53	2255-2548	53
WEN	WEN6001-6523	112	6119-6459	112
WEN	WEN8001-8011	0	0	0
WESTOKA	WES4001-5217	224	4056-5211	224
	WES5218-6000	219	5300-5810	219
	WES6524-7899	469	7000-7468	469
TOTAL		3789		3324

* The total number of plots in Allplots.agr was 3789; of these 3324 had locations.

NOCA	NOC1000-8024	0		505
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Importing the ecology data from the NCGBE Grizzly Bear study into Arcview

The grizzly study ecology plots fall into the following quadrants:

NEALL	1311
NWALL	814
SEALL	571
SWALL	628
TOTAL (all of these are in allplots.db)	3324

Preparations for importing plot plant ecology data into Arcview

(note names for UTM NAD 1983 are appended with "U10_83" instead of "U10_27")

Create grzasn_u10_27.shp: Import grzstand.db and grzasso.db into Arcview

1. Query plotid4.db, allplot2.db and grzstand to create file grzstan2 with the new plot id field, the northing and the easting in 1433 records.
2. Query grzstan2.db vs grzasso.db to generate grzasn.db (1433 records). Restructure the database so that the community fields are close together (COMMUNITY is the field from the ECOREP work, COMMASSO is from the field forms).
3. Repeat steps 6-10 above for **grzasn.db** to import the data into Arcview.

Attributes of Grz_asn_u10_27.shp

Plotnum Plot number

Id Plot number

Dominant Dominant coniferous tree species or XXXX if none. This is prepended to the field Keyval with an intervening dasy. Keyval is the cover value for the keyed dominant species.

Community Name of new community developed from Wooten report (+ for mosaic/ecotonal)

Commasso Name of community given on field data sheet

Adjveg Adjacent Vegetation (from field data sheets)

Keyed Plant series using Wenatchee key - Paradox version of script

Set Name of the TWINSPAN set

ALP = East central North Cascades xeric alpine

ALS = Sitka alder avalanche chute shrubfields

BUN = Shrub-bunchgrass, shrub-steppe

CUL = Cultivated orchards, pastures, fallow ground

CUT = Clearcut logged

EAA = East central North Cascades mixed conifer; lower, drier

EAB = East central North Cascades mixed conifer; higher, wetter

HIM = Central North Cascades high elevation meadows

POB = Western North Cascades high elevation meadows

RIC = Eastside hardwood riparian and swamp

RIX = Riparian

RUS = RUSP-ATFI shrubfield

TSA = West central North Cascades upper elevation forest

TSH = West central North Cascades low elevation forest

WET = Wetlands, generally low-gradient, non-forested

XXX = outliers

xxxOUT = outliers within a set

Northing UTM coordinates

Easting UTM coordinates

X_coor Geographic coordinates

Y_coor Geographic coordinates

Create grzextg_u10_27.shp: Import allplots.db and extg.db into Arcview

1. Query Allplots.db to get a list of all 3789 plots in that file and rename as plotid4.db.
2. Use the script renum.sc to label the plots with the correct data source.
3. Query to put the data in plotid4.db back into allplot2.db and name the answer allplots2.db.

4. Query allplot2.db to get 3324 records that have data in the northing field and rename this table grzloc.db.
5. Query grzloc.db vs extg.db to generate grzloc2.db (all 3324 have location data; 2331 of these had data in extg.db).
6. Export the data from grzloc2 into an Excel spreadsheet from Paradox for Windows and check to save header information. From Excel, export the data as a *.csv file.
7. Start Arcview and create a new view, then add a table to the view by clicking Project - Add Table.
8. Make the empty view window active and click View - Add Event Theme from the menu bar. In the next window, choose the table name, and specify x-coordinates to match the easting and y-coordinates to match the northing, then click OK.
9. From Arcview, convert the event theme to a shapefile (grzextg_u10_27.shp).
10. Reproject the files from u10_27 as necessary using the MI DNR reprojection extension.

Create grzsp_u10_27.shp: Import grzspall into Arcview

1. Edit the file GRZSPALL to replace all instances of field NEWCSIX ARTCAN (*Artemisia cana*) to ARTARB (*Artemisia arbuscula*) and all instances of field SPECIES ARCA to ARAB. (Plots 1277, 1277, 1278, 1279, 1280, 1282, 1286, 1287, 1290, 1291, 1293, 1294, 1295, 1296, 1297, 1534, 1729, 1734).
2. Edit the file grzasso.db to change ARCA to ARAB in the COMMASSO field for plots 1279, 1294, 1295. Change the following in the ADJVEG column: ART can -> ARTARB (2 plots).
3. Edit the file grzstand to change the field COMMUNITY ARCA -> ARAR (plots 1277, 1278, 1279, 1290) (table grzstan2).
4. From grzspall, create a new table, grzspal2, which has deleted fields NAT, INT, NLOC.
6. Add a field SEL (S) to each of the above tables, and modify NEWCSIX to be 11 characters instead of 9
7. Sort the tables by PLOTNUM, LAYER, COVER (descending), NEWCSIX, SPECIES.
8. Use script selrecs4.sc to mark the field SEL in GRZSPAL2.DB with the first 3 highest overstory trees, the first 3 highest regen trees and the first 8 highest understory plants in each table. The file GRZSPAL2.DB is copied into table tmp.db, which is the input file. Tmp2 is the output file (1431 records).
9. Make a file grzcode.db from alphasum.txt that has all the 4-letter codes. Charge ARCA to ARAR (*Artemisia arbuscula*).
10. Query the output file tmp2.db vs grzcode.db to replace the species codes with the Latin names in the table tmp2b.db.
11. Sort table tmp2b.db by PLOTNUM, LAYER, COVER (descending), NEWCSIX, Scientific Name, NEWCSIX.
12. Run script make1rec.sc on table tmp2b.db and rename the output table gzspal3.db (1430 records).
13. Query allplot2.db vs gzspal3.db to create file grzsp.db with the new plot id field, the northing and the easting in 1430 records.
14. Repeat steps 6-10 above for gzspal3.db to import the data into Arcview.

Retain these files in the allplots folder:

ALLPLOT2, EXTG, GRZASN, GRZDIST, GRZLOC2, GRZREJ, PLOTID4, GRZCODE, GRZSPAL2, GRZSP.

Archive these files in the donewith folder:

ALLPLOTS, GRZSTAN2, GRZLOC, GRZASSO, GRZSPALL, TMP, TMP2, TMP2B, TMP3, GZSPAL3, ALPHACODE.TXT