

aava_imnavaitcreek_dwalker_1987a_readme_metadata.pdf

AAVA readme file for Imnavait Creek Vegetation Plots (July 19, 2016)

Dataset Title: Alaska Arctic Vegetation Archive: Imnavait Creek Vegetation Plots

Dataset Author: Donald A. (Skip) Walker

Alaska Arctic Vegetation Archive Dataset Name: imnavaitcreek_dwalker (IC_DW)

Dataset Description:

Vegetation in the vicinity of the Imnavait Creek field site located in the Upper Kuparuk watershed of the Brooks Range was described by D.A. Walker et al. as part of a study that was initiated in the summer of a Department of Energy R4D (Response, Resistance, Resilience and Recovery from Disturbance) project. Imnavait Creek was chosen as a study site as it provides a good representation of the southern foothills of the Brooks Range, a glaciated region characterized by rolling tundra plains interspersed with hills, knobs and low ridges. The primary source document for this dataset is a data report prepared for the DOE (Department of Energy) R4D project (Walker et al. 1987a).

Eighty-four plots were subjectively located in 14 plant communities that occur in 19 broad habitat types including: 1) dry sandstone outcrops (6 plots), 2) glacial boulder fields (2 plots), 3) dry rocky till (5 plots), 4) hill slope nonsorted stripes (5 plots), 5) frost scars on stripes (5), 6) areas between nonsorted stripes (3 plots), 7) hill slopes between with solifluction (5 plots), 8) snowbeds (10 plots), 9) water tracks (7 plots), 10) margins of water tracks (2 plots), 11) hill slopes between water tracks, (12 plots), 13) west frost scars (3 plots), 14) hummocks and strangs in wet meadows of colluvial basins (3 plots), 15) wet tundra between strangs in colluvial basins (6 plots), 16) palsas (2 plots), 17) stream margins (4 plots), 18) stream channels (2 plots), and 19) beaded-stream ponds (3 plots).

Plots were primarily circular in shape and 78.5 square meters in area except for sites with insufficient homogeneous vegetation where smaller plots were used. Plots were permanently marked with a central wooden lath to which an aluminum tag was attached, with three additional short stakes marking the perimeter of the plot. Species and environmental data (including soil physical variables, subjective site assessments, and active layer depths) were collected in the field and soil samples were brought back to the lab for chemical assessments. Species cover-abundance, environmental site factors, and soil physical and chemical data are included in the data report (Walker et al. 1987a). GPS coordinates were obtained for many plots in the

mid-2000's. An aerial photograph and Google Earth were used to approximate the location and obtain coordinates of all but one of the remaining plots.

These data along with spectral and biomass data were subsequently used in several reports and publications listed below.

References:

Evans, B. M., D. A. Walker, C. S. Benson, E. A. Nordstrand, and G. W. Petersen. 1989. Spatial interrelationships between terrain, snow distribution and vegetation patterns at an arctic foothills site in Alaska. *Holarctic Ecology* 12:270-278.

Shippert, M. M., D. A. Walker, N. A. Auerbach, and B. E. Lewis. 1995. Biomass and leaf-area index maps derived from SPOT images for Toolik Lake and Imnavait Creek areas, Alaska. *Polar Record* 31:147-154.

Walker, D. A., N. D. Lederer, and M. D. Walker. 1987a. Permanent vegetation plots [at Imnavait Creek, AK]: Site factors, soil physical and chemical properties, and plant species cover. U.S. Department of Energy R4D Program Data Report. Plant Ecology Laboratory, Institute of Arctic and Alpine Research University of Colorado, Boulder, Colorado, USA.

Walker, D. A., P. J. Webber, N. D. Lederer, and M. D. Walker. 1987b. Terrain and vegetation of the U.S. Department of Energy R4D research site, Imnavait Creek, Alaska: I. Classification and mapping. U.S. Department of Energy, R4D Program Data Report. Plant Ecology Laboratory, Institute of Arctic and Alpine Research University of Colorado, Boulder, Colorado, USA.

Walker, D. A., and N. D. Lederer. 1987. Toposequence study: site factors, soil physical and chemical properties and plant species cover. U.S. Department of Energy R4D Program Data Report. Plant Ecology Laboratory, Institute of Arctic and Alpine Research University of Colorado, Boulder, Colorado, USA.

Walker, D. A., E. Binnian, B. M. Evans, N. D. Lederer, E. Nordstrand, and P. J. Webber. 1989. Terrain, vegetation and landscape evolution of the R4D research site, Brooks Range Foothills, Alaska. *Holarctic Ecology* 12:238-261.

Walker, D. A., N. A. Auerbach, and M. M. Shippert. 1995. NDVI, biomass, and landscape evolution of glaciated terrain in northern Alaska. *Polar Record* 31:69-178.

Walker, D. A., and M. D. Walker. 1996. Terrain and vegetation of the Imnavait Creek Watershed. Pages 73-108 in J. F. Reynolds and J. D. Tenhunen, editors. *Landscape Function: Implications for Ecosystem*

Disturbance, a Case Study in Arctic Tundra. Springer-Verlag, New York, USA.

Walker, M. D., D. A. Walker, and K. R. Everett. 1989. Wetland soils and vegetation, Arctic Foothills, Alaska. Biological Report 89(7). U.S. Fish and Wildlife Service, Department of Interior, Washington, D.C., USA.

Walker, M. D., D. A. Walker, and N. A. Auerbach. 1994. Plant communities of a tussock tundra landscape in the Brooks Range Foothills, Alaska. Journal of Vegetation Science 5:843-866.

Primary contact: Donald A. (Skip) Walker, dawalker@alaska.edu, 907-474-2460

Other contacts: Amy Breen, albreen@alaska.edu, 907-474-6927

Primary Agency: Alaska Geobotany Center, University of Alaska Fairbanks

Direct Plot Archive Record Link: <http://geobotanical.portal.gina.alaska.edu/catalogs/6803-alaska-arctic-vegetation-archive-imnavait-creek-v>

Data prepared by: Lisa Druckenmiller (ladruckenmiller@alaska.edu) and Amy Breen (albreen@alaska.edu)

Link to VegBank Record: Will add when available

Missing data: Indicated by '-9999' for numerical data and 'n/a' for categorical or text data

Files Available for Download:

1) AAVA Imnavait Creek Modified Source Data

1a) Imnavait Creek Species Cover

aava_imnavaitcreek_dwalker_1987a_spp_modsrc.csv

aava_imnavaitcreek_dwalker_1987a_spp_modsrc.xlsx

These files contain species cover data for the Imnavait Creek vegetation plots in both .csv and .xlsx format. The source of these data is the Imnavait Creek data report (Walker et al. 1987a). Species cover classes are by percent except for species with low cover where the symbols -, + and ++ were used. For the Turboveg database these symbols were replaced by 0.1, 0.5, and 0.5, respectively. Both the author's determination and the current taxonomy according to the Panarctic Species List (PASL) are listed. Taxa are listed in alphabetical order according to the accepted PASL name. In one instance, taxa were lumped into a single taxon in the PASL: 1)

Eriophorum angustifolium (Eriophorum angustifolium s. l. and Eriophorum angustifolium subarcticum). The plot numbers in the source data are the author's. The main plot numbers in the Turboveg database are accession numbers and will differ. The author's plot numbers are retained in the 'Field releve number' field in the Turboveg database.

1b) Imnavait Creek Environmental Data

aava_imnavaitcreek_dwalker_1987a_allenv_modsrc.csv
aava_imnavaitcreek_dwalker_1987a_allenv_modsrc.xlsx

These files contain modified environmental data for the Imnavait Creek vegetation plots in both .csv and .xlsx format. The source of these data is the Imnavait Creek Data Report (Walker et al. 1987a; Tables 1, 2, 4, 5, 6, 7 and text) and the Toolik-Arctic Geobotanical Atlas website (<http://www.arcticatlas.org/>). For the source of the fields within the file, see below. The header data in the Turboveg database only includes a subset of these data. The plot numbers in the source data are the author's. The main plot numbers in the Turboveg database are accession numbers and will differ. The author's plot numbers are retained in the 'Field releve number' field in the Turboveg database. The codes used in this file are in the legend for environmental variables in the project metadata folder (aava_imnavaitcreek_dwalker_1987a_envlegend_metadata.pdf).

Improvements to the source data include: 1) latitude and longitude were obtained for many plots in the mid-2000s by the Toolik GIS group and the remaining plot locations were estimated using an aerial photograph and Google Earth. In cases where either the A or B plot have latitude and longitude measures, it was applied to both plots. All data were converted to decimal degrees., 2) soil variables were derived by plot, typically at 10 cm depth, from the complete soils data in the ancillary folder. Soil texture is primarily from the top mineral horizon per the soil text descriptions; secondarily from 10 cm, or listed as 'organic' when no mineral horizon is present.

2) AAVA Imnavait Creek Turboveg Database

aava_imnavaitcreek_dawalker_1987_tv.zip

This file is the Imnavait Creek Turboveg Database (.dbf). Turboveg is a software program for managing vegetation-plot data (see <http://www.synbiosys.alterra.nl/turboveg/>). The database includes both species cover and environmental header data. The header data for the database are consistent across all datasets in the AAVA. There are both required and recommended fields for inclusion in the AAVA. Consequently, only a subset of the modified source environmental data are included in the database and these may be cross-walked to the AAVA data dictionary. The species nomenclature used in the database is according to the Panarctic Species List (beta 1.0) created for the Arctic Vegetation Archive. The current data dictionary and PASL files are required for the correct use of these data in Turboveg. These

files are updated periodically and available for download via 'Data and Resources' section of the data record.

For the cross-walk from the modified source environmental data to the Turboveg database, we made the following changes to the environmental data: 1) percent cover of less than one for bare soil, rock cover, low shrub, dwarf shrub, forb cover, lichen, bryophyte and horsetail cover were changed to "1 percent" as the database requires integers, and 2) aspect was converted as necessary to cross-walk to the Turboveg categories. For the cross-walk from the modified source species data to the Turboveg database, we made the following changes to the species data: 1) The species determinations are by the author. These may differ from the species names in the Turboveg database as the nomenclature in the database is according to the Panarctic Species List created for the Arctic Vegetation Archive, 2) in one instance, taxa were lumped into a single taxon in the PASL: 1) *Eriophorum angustifolium* (*Eriophorum angustifolium* s. l. and *Eriophorum angustifolium subarcticum*). and 3) species cover classes are percent cover except for species with low cover where the symbols -, + and ++ were used. For the Turboveg database these symbols were replaced by 0.1, 0.5, and 0.5, respectively.

3) AAVA Imnavait Creek Ancillary Data

3a) Imnavait Creek Plot Location Map

aava_imnavaitcreek_dwalker_1987a_plotmap_anc.pdf

This file is a plot map of the Imnavait Creek vegetation plots from the online Toolik-Arctic Geobotanical Atlas.

3b) Imnavait Creek Plot Photos

aava_imnavaitcreek_dwalker_1987a_plotphotos_anc.pdf

This file contains general plot and soil photos (if available) from the Imnavait Creek vegetation plots from the online Toolik-Arctic Geobotanical Atlas.

3c) Imnavait Creek Soils Data

aava_imnavaitcreek_dwalker_1987a_soildata_anc.csv

aava_imnavaitcreek_dwalker_1987a_soildata_anc.xlsx

aava_imnavaitcreek_dwalker_1987a_soildesc_anc.pdf

These are the soils data and descriptions for the Imnavait Creek vegetation plots that are modified from the data report (Tables 5, 6 & 7). Soil nomenclature and terminology are according to Soil Survey Staff (1974). See the data report (Walker et al. 1987a) and the Toolik-Arctic Geobotanical Atlas website (<http://www.arcticatlas.org/support/icdatareport/>) for further information.

3d) Imnavait Creek Spectral and Biomass Data

aava_imnavaitcreek_dwalker_1987a_spectralbiomassdata.anc.csv
aava_imnavaitcreek_dwalker_1987a_spectralbiomassdata.anc.xlsx

These are the complete NDVI, LAI, iPAR and above ground biomass data and description by Margaret M. Shippert for the Imnavait Creek permanent vegetation plots. The data is published in Shippert et al. (1995) and Walker et al. (1995).

The NDVI data are derived from field spectroscopy carried out with a ASD PS-II portable field spectrometer between 25 July and 10 August 1993. The NDVI values were calculated from reflectances at wavelengths corresponding to the Landsat TM red band (630–690 nm) and the near-infrared band (760–900 nm). The LAI was measured with a PCA-2000 plant canopy analyzer by LI-COR Inc. IPAR was measured with a LI-1000 line quantum sensor by LI-COR Inc. Total biomass was measured by collecting all above-ground organic material at each sample site within a 50x20 cm wire frame centered over the site of reflectance, LAI and iPAR measurements.

Overall 3 random replicates were sampled at each plot – these data sets are named by the suffix A, B, or C to the plot ID number. Note: We corresponded with Dr. Shippert and she informed us that the original data files have been lost during moves and only assume her Imnavait Creek Plot (IMN) numbers correspond to the Imnavait Creek plot numbers established by Walker whose field numbers begin with SW. Due to the difficulties in recovery of this data set, we assume that the plot numbers correspond to the plot numbers of Walker et al. (1991). Further assessment and verification of plot numbers is needed.

3e) Imnavait Creek Publications

evansb_1989_holarctecol_terrainsnowdist_vegpattern.pdf
shippertm_1995_polarrec_ndvibiomasslai.pdf
walkerd_1987a_datareport_imnavaitcreekvegplots.pdf
walkerd_1987b_datareport_imnavaitcreekclassification.pdf
walkerd_1989_hoarctecol_terrainveglandscapevo.pdf
walkerd_1995_polarrec_ndvibiomasslai.pdf
walkerd_1996_ecolstud_terrainvegimnavait.pdf
walkerm_1989_usfwsreport_arcticwetlandsoilveg.pdf
walkerm_1994_jvegsci_tsscktnrveg.pdf

These are pdf files of all but one (Walker and Lederer 1987; only available in hard copy) of the references cited in the dataset description for the Imnavait Creek vegetation plots. Journal names are abbreviated using the standards for the abbreviation of titles of periodicals and serial titles.

4) AAVA Imnavait Creek Metadata

aava_imnavaitcreek_dwalker_1987a_readme_metadata.txt
aava_imnavaitcreek_dwalker_1987a_envlegend_metadata.pdf

These files are metadata for the Imnavait Creek vegetation plots and include a readme file and metadata legend for the modified environmental data that are specific to this dataset.

Modifications to environmental source data:

The table below in comma separated values format indicates the modifications made to source data in the preparation of the AAVA Imnavait Creek Modified Source Environmental Data files (aava_imnavaitcreek_dwalker_1987a_allenv_modsrc.csv and aava_imnavaitcreek_dwalker_1987a_allenv_modsrc.xlsx) and fields that were used to crosswalk these data to the Turboveg database (aava_imnavaitcreek_dawalker_1987_tv.zip).

VARIABLE,IN MODIFIED SOURCE ENVIRONMENTAL DATA FILE,IN TURBOVEG FILE,SOURCE AND CHANGES MADE TO DATA
FIELD PLOT NUMBER,Y,Y,All tables. Walker et al. 1987a. The plot numbers in the modified source data are the author's. The main plot numbers in the Turboveg database are accession numbers and will differ. The author's plot numbers are retained in the 'Field releve number' field in the Turboveg database.
PLANT COMMUNITY NAME,Y,Y,Table 1 Walker et al. 1987a. 'Plant community name' in Turboveg except for those plots from M. Walker et. al.'s 1994 analysis. Also 'Site moisture'.
MICROSITE,Y,N,Table 1 & 2 Walker et al. 1987a. Aided with Crosswalk to the Turboveg field 'Habitat type.'
DATE SAMPLED (YYYYMMDD),Y,Y,Table 4 Walker et al. 1987a.
LATITUDE WGS 84 (DD),Y,Y,"Data for many of the plots were collected by Toolik GIS mid 2000's and may be found in the Environmental Variables table (Table 4 only in MS Excel file) for download on Toolik-Arctic Vegetation Archive Website. If location data was only present for an A or a B plot it was applied to both plots. Location data for plots 37 41, 46 47 49, and 67-73 were estimated by L. Druckenmiller using the aerial photograph plot map and Google Earth. All coordinates were projected to the WGS84 datum by L. Wirth (GINA) in 2013 and checked against the aerial photograph."
LONGITUDE WGS 84 (DD),Y,Y,"Data for many of the plots were collected by Toolik GIS mid 2000's and may be found in the Environmental Variables table (Table 4 only in MS Excel file) for download on Toolik-Arctic Vegetation Archive Website. If location data was only present for an A or a B plot it was applied to both plots. Location data for plots 37 41, 46 47 49, and 67-73 were estimated by L. Druckenmiller using the aerial photograph plot map and Google Earth. All coordinates were projected to the WGS84 datum by L. Wirth (GINA) in 2013 and checked against the aerial photograph."
LANDFORM (CODE),Y,N,Table 4 Walker et al 1987a. Aided in crosswalk to the Turboveg field 'Surficial geology.'
TERRAIN UNIT (CODE),Y,N,Table 4 Walker et al 1987a. Aided in crosswalk to the Turboveg field 'Surficial geology.'
SLOPE (PERCENT),Y,Y,Table 4 Walker et al 1987a.

ASPECT (DEGREES),Y,Y,Table 4 Walker et al 1987a. Crosswalked to the Turboveg field 'Aspect.'

EXPOSURE (SCALAR),Y,N,Table 4 Walker et al 1987a.

SURFACE FORM (CODE),Y,N,Table 4 Walker et al. 1987a. Aided with crosswalk to the Turboveg field 'Habitat type.'

MICROSITE (CODE),Y,N,Table 4 Walker et al. 1987a. Aided in crosswalk to the Turboveg field 'Habitat type.'

COVER OF MICROSITE (PERCENT),Y,N,Table 4 Walker et al. 1987a.

SITE MOISTURE (SCALAR),Y,N,Table 4 Walker et al. 1987a.

ESTIMATED SNOW DURATION (SCALAR),Y,N,Table 4 Walker et al. 1987a.

SNOW DEPTH (CM) 5/17/87) MEAN OF 5 MEASUREMENTS,Y,N,Table 4 Walker et al. 1987a.

STABILITY (SCALAR),Y,N,Table 4 Walker et al. 1987a.

CRYOTURBATION (PERCENT),Y,N,Table 4 Walker et al. 1987a.

HEIGHT OF MICRORELIEF (CM),Y,N,Table 4 Walker et al. 1987a.

TUSSOCK THAW DEPTH (CM),Y,N,Table 4 Walker et al. 1987a.

INTER-TUSSOCK THAW DEPTH (CM),Y,N,Table 4 Walker et al. 1987a.

BARE SOIL (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

ROCK COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

SOIL TYPE (CODE),Y,N,Table 4 Walker et al. 1987a.

SOIL MOISTURE (SCALAR),Y,N,Table 4 Walker et al. 1987a.

LOW SHRUB COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

DWARF SHRUB COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

AVERAGE SHRUB HEIGHT (CM),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

TUSSOCK GRAMINOID COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

NON-TUSSOCK GRAMINOID COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

FORB COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

LICHEN COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

BRYOPHYTE COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

HORSETAIL COVER (PERCENT),Y,Y,"Table 4 Walker et al. 1987a. In the

Turboveg Database, values of less than 1.0 percent were rounded up to 1.0 percent."

DISTURBANCE-HUMAN (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-FOX (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-BEAR (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-CARIBOU (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-SQUIRREL (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-LEMMING OR VOLE (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-MOOSE (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-BIRD (SCALAR),Y,N,Table 4 Walker et al. 1987a.

DISTURBANCE-INSECT (SCALAR),Y,N,Table 4 Walker et al. 1987a.

SOIL ORGANIC DEPTH (CM),Y,Y,Table 5 Walker et al. 1987a. L.

Druckenmiller used soil horizon depths and descriptions to estimate soil organic layer depths for Turboveg.

SOIL HORIZON AT 10 CM,Y,N,Table 6 Walker et al. 1987a.

WET COLOR AT 10 CM (MUNSELL),Y,N,Table 6 Walker et al. 1987a.

ORGANIC MATTER AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

COARSE GRAVEL 76.1-12.7 MM AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

FINE GRAVEL 12.7-2.0 MM AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

SAND PARTICLE SIZE 2.0-0.05 MM AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

SILT PARTICLE SIZE 0.05-0.002 MM AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

CLAY PARTICLE SIZE LESS THAN 0.002 MM AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

TEXTURE AT 10 CM (SOIL SURVEY STAFF 1974),Y,N,"Table 6 Walker et al. 1987a. Soil abbreviations follow U.S. Department of Agriculture, Natural Resources Conservation Service standards."

SOIL TEXTURE AT TOP MINERAL HORIZON (SOIL SURVEY STAFF 1974),Y,Y,"Table 6 Walker et al. 1987a. Soil abbreviations follow U.S. Department of Agriculture, Natural Resources Conservation Service standards. Soil texture is primarily from the top mineral horizon per the soil descriptions; secondarily from 10 cm, or are assigned 'organic' when no mineral horizon is present. Crosswalked to the Turboveg field 'Soil texture.'"

HYGROSCOPIC MOISTURE AT 10 CM (PERCENT),Y,N,Table 6 Walker et al. 1987a.

BULK DENSITY AT 10 CM (G/CC),Y,N,Table 6 Walker et al. 1987a.

SOIL PH AT 10 CM,Y,Y,Table 7 Walker et al. 1987a.

SOIL PH AT TOP MINERAL HORIZON,Y,N,Table 7 Walker et al. 1987a.

CA++ AT 10 CM (MEQ/100 G),Y,N,Table 7 Walker et al. 1987a.

CA++ AT 10 CM (MCG/G),Y,N,Table 7 Walker et al. 1987a.

MG++ AT 10 CM (MEQ/100 G),Y,N,Table 7 Walker et al. 1987a.

MG++ AT 10 CM (MCG/G),Y,N,Table 7 Walker et al. 1987a.

K+ AT 10 CM (MEQ/100 G),Y,N,Table 7 Walker et al. 1987a.

K+ AT 10 CM (MCG/G),Y,N,Table 7 Walker et al. 1987a.

NO3 AT 10 CM (MCG/G),Y,N,Table 7 Walker et al. 1987a.

PLOT SIZE (SQUARE METERS),Y,Y,From section on Plot size in text pg.1

Walker et al. 1987a.

PLOT SHAPE,Y,Y,From section on Plot size in text pg.1 Walker et al. 1987a. Crosswalked to Turboveg field 'Plot shape.'

REMARKS,Y,Y,"Where Braun-Blanquet names (Walker et al. 1994) or community description Table 1 (Walker et al. 1987a) are used in the field 'Plant community name', a community description Table 1 (Walker et al. 1987a) or sorted table community name Appendix A (Walker et al. 1987b), respectively, are included in the remarks."