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/** ----- Creation of the Ground-truthing Sample Squares -----
/**
/** FILE NAME:          GT_squares.txt
/** CREATED BY:         RENEE SCHICKER
/** DATE CREATED:       15 DECEMBER 2009
/** UPDATED:           16 DECEMBER 2009
/**
/** The scripts may be supplied in a more readily useable format if the work is acknowledged
/** CONTACT:           Renee_Schicker@hotmail.com
/**
/** PURPOSE:           take the five shapefile point layers (20 points in each) pull apart
/**                     using a loop, create individual squares of 1km by 1km so the
/**                     point centres in the middle.
/**
/** HOW:               using a counted loop which stops at count = 21. Loop runs the
/**                     make_squares routine which selects the points that don't equal
/**                     the sample site number that matches the count, deletes these.
/**                     each individual point layer is buffered by 500 m, the sample site
/**                     column re-created and filled in according to count. A grid is
/**                     then made based on this buffered layer with the pixel size set at
/**                     1000 m. The grid is then converted back to a cover. All
/**                     intermediated files are deleted as they become redundant in the
/**                     process.
/**
/** *****

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```

/*CREATEWorkspace D:\Renee_GIS\GT_SampSites
Workspace D:\Renee_GIS\GT_SampSites

```

```

&IF [EXIST LR_20_VH -COVER] &THEN KILL LR_20_VH ALL
&IF [EXIST LR_20_H -COVER] &THEN KILL LR_20_H ALL
&IF [EXIST LR_20_M -COVER] &THEN KILL LR_20_M ALL
&IF [EXIST LR_20_L -COVER] &THEN KILL LR_20_L ALL
&IF [EXIST LR_20_VL -COVER] &THEN KILL LR_20_VL ALL

```

```

SHAPEARC XY_VH_20RS LR_20_VH
SHAPEARC XY_H_20RS LR_20_H
SHAPEARC XY_M_20RS LR_20_M
SHAPEARC XY_L_20RS LR_20_L
SHAPEARC XY_VL_20RS LR_20_VL

```

```

&RUN D:\Renee_GIS\Scripts\DEF_PROJ.AML

```

```

&SETVAR .Count = 1
&DO &WHILE %.Count% < 21
  &TYPE GOING THROUGH LOOP %.COUNT% OF 20
  &CALL Make_Squares
  &SETVAR .Count = %.Count% + 1
&END
&RETURN

```

/\*\*\*\*\*

&ROUTINE Make\_Squares

COPY LR\_20\_VH LR\_VH\_SS%.Count%

COPY LR\_20\_H LR\_H\_SS%.Count%

COPY LR\_20\_M LR\_M\_SS%.Count%

COPY LR\_20\_L LR\_L\_SS%.Count%

COPY LR\_20\_VL LR\_VL\_SS%.Count%

&RUN D:\Renee\_GIS\Scripts\CheckProgEdit.txt

EC LR\_VH\_SS%.Count%

EF POINT

SELECT FOR SampleSite NE %.Count%

DELETE

SAVE

EC LR\_H\_SS%.Count%

EF POINT

SELECT FOR SampleSite NE %.Count%

DELETE

SAVE

EC LR\_M\_SS%.Count%

EF POINT

SELECT FOR SampleSite NE %.Count%

DELETE

SAVE

EC LR\_L\_SS%.Count%

EF POINT

SELECT FOR SampleSite NE %.Count%

DELETE

SAVE

EC LR\_VL\_SS%.Count%

EF POINT

SELECT FOR SampleSite NE %.Count%

DELETE

SAVE

Q

BUFFER LR\_VH\_SS%.Count% BLR\_VH\_SS%.Count% ## 500 # POINT

BUFFER LR\_H\_SS%.Count% BLR\_H\_SS%.Count% ## 500 # POINT

BUFFER LR\_M\_SS%.Count% BLR\_M\_SS%.Count% ## 500 # POINT

BUFFER LR\_L\_SS%.Count% BLR\_L\_SS%.Count% ## 500 # POINT

BUFFER LR\_VL\_SS%.Count% BLR\_VL\_SS%.Count% ## 500 # POINT

&IF [EXIST LR\_VH\_SS%.Count% -COVER] &THEN KILL LR\_VH\_SS%.Count% ALL

&IF [EXIST LR\_H\_SS%.Count% -COVER] &THEN KILL LR\_H\_SS%.Count% ALL

&IF [EXIST LR\_M\_SS%.Count% -COVER] &THEN KILL LR\_M\_SS%.Count% ALL

&IF [EXIST LR\_L\_SS%.Count% -COVER] &THEN KILL LR\_L\_SS%.Count% ALL

&IF [EXIST LR\_VL\_SS%.Count% -COVER] &THEN KILL LR\_VL\_SS%.Count% ALL

ADDITEM BLR\_VH\_SS%.Count%.PAT BLR\_VH\_SS%.Count%.PAT SampleSite 5 5 I  
ADDITEM BLR\_H\_SS%.Count%.PAT BLR\_H\_SS%.Count%.PAT SampleSite 5 5 I  
ADDITEM BLR\_M\_SS%.Count%.PAT BLR\_M\_SS%.Count%.PAT SampleSite 5 5 I  
ADDITEM BLR\_L\_SS%.Count%.PAT BLR\_L\_SS%.Count%.PAT SampleSite 5 5 I  
ADDITEM BLR\_VL\_SS%.Count%.PAT BLR\_VL\_SS%.Count%.PAT SampleSite 5 5 I  
&RUN D:\Renee\_GIS\Scripts\CheckProgEdit.txt

EC BLR\_VH\_SS%.Count%  
EF POLYGON  
SELECT INSIDE = 100  
CALCULATE SampleSite = %.Count%  
SAVE

EC BLR\_H\_SS%.Count%  
EF POLYGON  
SELECT INSIDE = 100  
CALCULATE SampleSite = %.Count%  
SAVE

EC BLR\_M\_SS%.Count%  
EF POLYGON  
SELECT INSIDE = 100  
CALCULATE SampleSite = %.Count%  
SAVE

EC BLR\_L\_SS%.Count%  
EF POLYGON  
SELECT INSIDE = 100  
CALCULATE SampleSite = %.Count%  
SAVE

EC BLR\_VL\_SS%.Count%  
EF POLYGON  
SELECT INSIDE = 100  
CALCULATE SampleSite = %.Count%  
SAVE  
Q

POLYGRID BLR\_VH\_SS%.Count% VH\_SS%.Count%G SampleSite  
1000  
Y

POLYGRID BLR\_H\_SS%.Count% H\_SS%.Count%G SampleSite  
1000  
Y

POLYGRID BLR\_M\_SS%.Count% M\_SS%.Count%G SampleSite  
1000  
Y

POLYGRID BLR\_L\_SS%.Count% L\_SS%.Count%G SampleSite

1000

Y

POLYGRID BLR\_VL\_SS%.Count% VL\_SS%.Count%G SampleSite

1000

Y

&IF [EXIST BLR\_VH\_SS%.Count% -COVER] &THEN KILL BLR\_VH\_SS%.Count% ALL  
&IF [EXIST BLR\_H\_SS%.Count% -COVER] &THEN KILL BLR\_H\_SS%.Count% ALL  
&IF [EXIST BLR\_M\_SS%.Count% -COVER] &THEN KILL BLR\_M\_SS%.Count% ALL  
&IF [EXIST BLR\_L\_SS%.Count% -COVER] &THEN KILL BLR\_L\_SS%.Count% ALL  
&IF [EXIST BLR\_VL\_SS%.Count% -COVER] &THEN KILL BLR\_VL\_SS%.Count% ALL

&IF [EXIST GT\_VH\_SS%.Count% -COVER] &THEN KILL GT\_VH\_SS%.Count% ALL  
&IF [EXIST GT\_H\_SS%.Count% -COVER] &THEN KILL GT\_H\_SS%.Count% ALL  
&IF [EXIST GT\_M\_SS%.Count% -COVER] &THEN KILL GT\_M\_SS%.Count% ALL  
&IF [EXIST GT\_L\_SS%.Count% -COVER] &THEN KILL GT\_L\_SS%.Count% ALL  
&IF [EXIST GT\_VL\_SS%.Count% -COVER] &THEN KILL GT\_VL\_SS%.Count% ALL

GRIDPOLY VH\_SS%.Count%G GT\_VH\_SS%.Count%  
GRIDPOLY H\_SS%.Count%G GT\_H\_SS%.Count%  
GRIDPOLY M\_SS%.Count%G GT\_M\_SS%.Count%  
GRIDPOLY L\_SS%.Count%G GT\_L\_SS%.Count%  
GRIDPOLY VL\_SS%.Count%G GT\_VL\_SS%.Count%

&IF [EXIST VH\_SS%.Count%G -GRID] &THEN KILL VH\_SS%.Count%G ALL  
&IF [EXIST H\_SS%.Count%G -GRID] &THEN KILL H\_SS%.Count%G ALL  
&IF [EXIST M\_SS%.Count%G -GRID] &THEN KILL M\_SS%.Count%G ALL  
&IF [EXIST L\_SS%.Count%G -GRID] &THEN KILL L\_SS%.Count%G ALL  
&IF [EXIST VL\_SS%.Count%G -GRID] &THEN KILL VL\_SS%.Count%G ALL

&RETURN