Creating county distribution maps from records in GrylTett.mdb

Update the GeographID field for any new records:

 run qryUpdatetblMainGeographID
 run qryUpdatetblRecordedSongsGeographID
 Note: [to see records without GeographID: run qryGeographIDProblemsMain run qryGeographIDProblemstblRecordedSongs]

Query the database for the desired species:

- 1. Open frmSwitchboard
- 2. Click on "Get Data for SAS Map" option
- 3. Enter Genus & Specific Name desired when prompted

A warning like this will appear:

Microsoft	Access					×	
	Microsoft Acces	s can't append all the	records in the a	append query			
1	Microsoft Access set 0 field(s) to Null due to a type conversion failure, and it didn't add 73 record(s) to the table due to key violations, 0 record(s) due to lock violations, and 0 record(s) due to validation rule violations. Do you want to run the action query anyway? To ignore the error(s) and run the query, click Yes. For an explanation of the causes of the violations, click Help.						
		(<u>Y</u> es	No	Help			

4. Click Yes

[note: this warning appears because Access dosen't add all records to the table - it only adds non-duplicate records]

5. Access will return the requested query

Create a comma deliminated file:

- 1. Go to "File" then "Export"
- 2. Change "Save as Type" to "Text Files (*.txt, *.csv, *.tab, *.asc)
- 3. Change filename to the desired species number.csv.

For example, this is how you would save the query for Neoconocephalus robustus:

New way files Novell WebAccess Compose Message_files PDFsina SAS MAPS (Katydids) Scratch						
File <u>n</u> ame:	195.csv	•	Save <u>f</u> ormatted	📙 Save All 🔹		
Save as <u>t</u> ype:	Text Files (*.txt;*.csv;*.tab;*.asc)	•	Matostart	Cancel		

4. Press "Save All"

The Export Text Wizard will appear:

Delimited - Characters such as comma or tab s Fixed Width - Fields are aligned in columns with ample export format: "CO", 115, 1 "DE", 1, 3 "IA", 13, 4	eparate each field
C Fixed Width - Fields are aligned in columns with ample export format: 1 "CO", 115, 1 2 "DE", 1, 3 3 "IA", 13, 4	n spaces between each field
ample export format: 1 "CO", 115, 1 2 "DE", 1, 3 3 "IA", 13, 4	
ample export format: 1 "CO", 115, 1 2 "DE", 1, 3 3 "IA", 13, 4	
<pre>ample export format: 1 "CO", 115, 1 2 "DE", 1, 3 3 "IA", 13, 4</pre>	ŕ
mple export format: 1 "CO", 115, 1 2 "DE", 1, 3 3 "IA", 13, 4	
1 "CO",115,1 2 "DE",1,3 3 "I&",13,4	-
2 "DE", 1, 3 3 "IA", 13, 4	-
3 "IA", 13, 4	
-	
1 "IA",49,1	
5 "IA",51,4	
5 "IA",59,4	
	<u>ا</u>
	a David Manufa Provide

- 4. Click "Next"
- 5. Change "Text Qualifier" to "{none}"

😰 Export Tex	t Wizard				×
What delimiter is affected in (r separates your fie the preview below.	elds? Select the ap	opropriate delimite	er and see ho	w your text
Choose the	delimiter that separ	ates your fields:			
C Tab	C Semicolon	Comma	C Space	C Other:	
Include Fie	ld Names on First R	ow	Tex	d Qualifier:	{none}
CO,115,1					
DE,1,3					
18,13,4					
18,49,1					
18,51,4					
1,35,4					
•					▶
Advanced		Cancel	< <u>B</u> ack N	lext >	Einish

6. Click "Finish"

Using SAS to make the maps

1. Open SASmaps.sas

Log on to work station 8 in the Computer Teaching Lab

Open SASmaps.sas by double clicking on it

These initial lines of SASmaps.sas will be visible in the SAS Program Window:

```
**SASmaps** ;
%let name=021;
%let maptitle=Inscudderia strigata;
Filename gtmaps "a:\&name..csv";
```

2. Make the SASmap for a species.

For "name", enter the three-digit species number [e.g., 008].

For "maptitle," enter the name of the species [e.g., Amblycorypha rotundifolia].

If the data to be mapped are not on the a: drive, substitute the correct path for $a: \setminus$ in the line beginning with "Filename gtmaps."

Press the F8 key to execute the mapping program.

[The map will be saved to *C:\mygifs*. This folder can be reached by opening CTL8 (icon in upper left of desktop) and selecting **LocalDisk (C:)** [mygifs.]

3. Prepare to make the SASmap for another species.

Press F8 to return to the program window of SAS.

Press F4 to reload the program into that window.

Return to step 2.

Note: Running SASmaps.sas requires a computer that has the SAS program, including SAS/GRAPH, which may not have been installed with the main program. Running SASmaps.sas also requires a "mygifs" folder on the c: drive. That is because the program directs that its driver file be deposited in that folder. It also directs that the image files it creates be deposited there. The relevant SASmaps.sas program lines are:

Libname Gdevice0 "c:\mygifs";

and

Filename Gsasfile "c:\mygifs\&name.mc.gif";

Note: When SASmaps.sas is run for the first time, it adds a driver for making the images:

proc gdevice catalog=GDEVICE0.devices nofs; add MAPGIF

When the program is run on subsequent occasions, this creates an error statement in SAS's log, because MAPGIF is already in the driver file. To eliminate the error statement, change

add MAPGIF

to

modify MAPGIF

in SASmaps.sas.