

Sage-Grouse Habitat Monitoring Forms in DIMA Tutorial

Step 1. Import Sage Grouse Species and Groups (tutorial attached in Appendix A)

Step 2. Select the Site and Plot that you are interested in and click Enter/Edit Data

The screenshot shows the DIMA Database software interface. The main window is titled "Database for Inventory, Monitoring and Assessment" and includes a "Main Menu" on the left with options like "Help", "System Set-Up", "Support Tables", "Site/Plot Description", "Data", "Reports", "Enter/View Photos", "View Documents", "Administrator", "Administrative Functions", and "Data-Entry Method". The "Data-Quick-View" table displays the following data:

Site	Plot
Sagebrush	BLM 2016
Sage-001	
Sage-002	

The "Enter/Edit Data" button is highlighted with a red box. Other buttons on the right include "New Site", "New Plot", "Edit Plot", "Data Status", and "Manage Tags". The bottom of the interface features logos for "dcs", "NRCS", and "USGS".

Step 3. Select Sage-Grouse Habitat and click on the **View** box

The screenshot shows the 'Enter/Edit Data' window in the DIMA Database application. The window has a title bar 'DIMA Database' and a menu bar with 'File', 'Home', 'Create', 'External Data', 'Database Tools', and 'Add-Ins'. Below the menu bar is a ribbon with various icons for file operations, data manipulation, and text formatting. The main area of the window contains the 'Enter/Edit Data' dialog box. This dialog box has a 'Help' button and a 'Close' button. It is divided into two main sections: 'Select Method' and 'Select Site and Plot'. The 'Select Method' section has a list box with the following items: 'Line-Point Intercept', 'Continuous Line Intercept', 'Nested Frequency Management Record', 'Rangeland Health (Qual. Assess.)', 'Sage-Grouse Habitat' (highlighted with a red box), 'Soil Stability', and 'Species Richness'. The 'Select Site and Plot' section has two dropdown menus: 'Site' (set to 'Sagebrush') and 'Plot' (set to 'Sage-002'). Below these sections are three buttons: 'New...', 'Show Existing Data Forms (based on the above selections)', and 'Show All Data Forms (for All Sites)'. At the bottom of the dialog box is a table with columns 'View', 'Site', 'Plot', and 'Home Range'. The 'View' column has a checkbox that is highlighted with a red box. The 'Site' column has the value 'Sagebrush', the 'Plot' column has 'Sage-002', and the 'Home Range' column has '- no data -'. The status bar at the bottom of the window says 'Form View'.

View	Site	Plot	Home Range
☐	Sagebrush	Sage-002	- no data -

Step 4. Complete information in the Home Range Descriptions including the Date Established (ensure it matches the data/year that you would like to analyze), Home Range Name, Evaluators, Populations, Land Cover and Site Info

The screenshot shows the 'Sage-Grouse Habitat Monitoring' form within the 'DIMA Database' application. The form is titled 'Sage-Grouse Habitat Monitoring' and includes the following fields and options:

- Site:** Sagebrush
- Plot:** Sage-002
- Home Range Name:** Test
- Home Range Description:** Leks, Monitoring
- Plot:**
 - State:** ID
 - County:** Owyhee
 - Ecological Site:** UNKNOWN
 - GPS Coord. System:** Decimal Degrees
 - Datum:** NAD83
 - Zone:**
- Date Established:** 3/23/2015 (highlighted with a red box)
- Evaluators:** John Doe
- Population:** 2
- Land Cover:** sparse
- Site Info:** Arid
- Notes:**

The form is displayed in 'Form View' at the bottom left of the window.

Step 5. Click on the Leks tab to enter data for Leks including Lek Descriptions and Lat/Long
*If you are unable to release coordinates for a Lek, use 1.1111, 1.1111 as a generic description

The screenshot shows the DIMA Database application window. The title bar reads "DIMA Database". The menu bar includes "File", "Home", "Create", "External Data", "Database Tools", and "Add-Ins". The ribbon contains various tool groups: "Views", "Clipboard", "Sort & Filter", "Records", "Find", "Window", and "Text Formatting".

The main form is titled "Sage-Grouse Habitat Monitoring". It has a tabbed interface with three tabs: "Home Range Description", "Edit Lek", and "Monitoring". The "Monitoring" tab is currently selected.

Form fields and controls include:

- Site:** Sagebrush
- Plot:** Sage-002
- Home Range Name:** Test
- Lek Description:** Test
- Latitude:** 1.1111
- Longitude:** 1.1111
- Notes:** (Empty text area)

Buttons include "Edit Plot", "Delete", "Close", "Return to Lek list", "Apply changes", and "Delete Lek...".

At the bottom of the form, there is a red text instruction: "Either Apply changes or Delete".

The status bar at the bottom of the application window shows "Form View" on the left and "Num Lock" on the right, along with several system icons.

Step 6. Under the Monitoring tab you will now begin populating the S forms. Select the form of interest from the Select Stage tab. Click add new.

The screenshot displays the DIMA Database application window. The main form is titled "Sage-Grouse Habitat Monitoring" and is currently in "Form View". The form contains several input fields: "Site" (Sagebrush), "Plot" (Sage-002), and "Home Range Name" (Test). There are buttons for "Edit Plot", "Delete", and "Close". Below these fields are tabs for "Home Range Description", "Edit Lek", and "Monitoring". The "Monitoring" tab is active, showing a large empty table area. To the right of the table is a "Select Stage" dropdown menu, which is highlighted with a red box, and an "Add New..." button. Below the table is a "Delete Selected..." button. At the bottom of the form, a note states "Single-click = Select; Double-click = edit". The software's ribbon menu is visible at the top, with tabs for File, Home, Create, External Data, Database Tools, and Add-Ins. The status bar at the bottom shows "Form View" and "Num Lock".

Sage-Grouse Habitat

Sage-Grouse Habitat Monitoring

Site: Sagebrush

Plot: Sage-002

Home Range Name: Test

Home Range Description | Edit Lek | **Monitoring**

Select Stage

Add New...

Delete Selected...

Single-click = Select; Double-click = edit

Form View

Num Lock

Site Scale S Forms

*Note that all of the forms should be filled out/populated by a biologist with knowledge of the Habitat Assessment Framework

S-2: Select S-2 from the Monitoring tab and click Add New to begin filling out the form. Ensure that the date matches that of other site forms. For example, if you collected site data on 3/25/15, make sure that the S-2 form has the same date. Using the HAF, determine if the site indicators are Suitable/Marginal/Unsuitable. Utilize the Notes and Rationale for Overall Suitability Rating boxes as needed. Close form when complete. Data will be automatically saved.

The screenshot shows the 'Site-Scale Habitat Suitability Worksheet' form within the 'DIMA Database' application. The form is titled 'Site-Scale Habitat Suitability Worksheet' and 'S-2 - Breeding Habitat (Leks)'. It includes a 'Delete' button and a 'Close' button. The form contains several input fields and dropdown menus:

- Home Range:** A text box containing 'Test' and a dropdown menu with 'Arid Site' selected.
- Evaluator(s):** A text box containing 'Jane Doe'.
- Date:** A text box containing '10/31/2016', which is highlighted with a red rectangle.
- Lek:** A dropdown menu with 'Test' selected.
- Status:** A dropdown menu with 'Undetermined' selected.
- GPS File:** A text box containing '1234'.
- Availability of Sagebrush Cover:** A dropdown menu with 'Suitable' selected.
- Proximity of Detrimental Land Uses:** A dropdown menu with 'Marginal' selected.
- Proximity of Trees/Tall Structures:** A dropdown menu with 'Marginal' selected.
- Site-Scale Suitability:** A dropdown menu with 'Marginal' selected.
- Anthropogenic Noise Description:** A text box.
- Rationale for Overall Suitability Rating:** A text box.
- Notes:** A text box.

The form is displayed in 'Form View' at the bottom left. The bottom right corner shows 'Num Lock' and 'Filtered' status.

S-3: Select S-3 from the Monitoring tab and click Add New to begin filling out the form. Select Associated Leks from the Select Lek dropdown. Click Append.

Click Recalc from LPI and Species Richness. If no data appears, ensure that the date matches the date in the LPI and Species Richness forms of interest and ensure that you have properly followed Step 1 (Import Sage Grouse Species and Groups). Using the HAF, determine if the site indicators are Suitable/Marginal/Unsuitable. Utilize the Notes and Rationale for Overall Suitability Rating boxes as needed. Close form.

The screenshot shows the 'Site-Scale Habitat Suitability Worksheet' form within the DIMA Database application. The form is titled 'S-3 - Breeding Habitat (Nesting/Early Brood-Rearing)'. It includes fields for 'Home Range' (Test), 'Arid Site', 'Date' (2/16/2015), and 'Evaluator(s)' (John Doe, Jane Doe). There is a section for 'Associated Leks' with a dropdown menu set to 'Test' and buttons for 'Append' and 'Delete'. The main section contains various habitat indicators with dropdown menus and numerical values: Sagebrush Canopy Cover (Marginal, 14%), Sagebrush Height (Suitable, 53cm), Predominant Sagebrush Shape (Suitable, 3 (Spread), 0 (Col)), Perennial Grass Height (Suitable, 36cm), Perennial Forb Height (Unsuitable), Perennial Grass Cover (Marginal, 9%), Perennial Forb Cover (Unsuitable, 0%), Preferred Forb Availability (Unsuitable, 0), Site-Scale Suitability (Marginal), Does Ecological Site potential limit Suitability potential: (Unknown), and Drought Condition (Mid-Range). A 'Recalc from LPI and Species Richness...' button is present, with a note 'Calculations based on same year as worksheet'. At the bottom, there are fields for 'Rationale for Overall Suitability Rating' and 'Notes'. The application window shows a standard menu bar (File, Home, Create, External Data, Database Tools, Add-Ins) and a toolbar with various icons for data manipulation and formatting.

Indicator	Value
Home Range	Test
Arid Site	
Date	2/16/2015
Evaluator(s)	John Doe, Jane Doe
Associated Leks	Test
Sagebrush Canopy Cover	Marginal (14%)
Sagebrush Height	Suitable (53cm)
Predominant Sagebrush Shape	Suitable (3 (Spread), 0 (Col))
Perennial Grass Height	Suitable (36cm)
Perennial Forb Height	Unsuitable
Perennial Grass Cover	Marginal (9%)
Perennial Forb Cover	Unsuitable (0%)
Preferred Forb Availability	Unsuitable (0)
Site-Scale Suitability	Marginal
Does Ecological Site potential limit Suitability potential:	Unknown
Drought Condition	Mid-Range
Rationale for Overall Suitability Rating	
Notes	

S-4: Select S-4 from the Monitoring tab and click Add New to begin filling out the form.

Click Recalc from LPI and Species Richness. If no data appears, ensure that the date matches the date in the LPI and Species Richness forms of interest and ensure that you have properly followed Step 1 (Import Sage Grouse Species and Groups). Using the HAF, determine if the site indicators are Suitable/Marginal/Unsuitable. Utilize the Notes and Rationale for Overall Suitability Rating boxes as needed. Close form when complete. Data will be automatically saved.

DIMA Database

Data Database Tools Add-Ins

Ascending Selection
Descending Advanced
Remove Sort Toggle Filter

Refresh All
New
Save
Delete
More

Totals
Spelling
More

Replace
Go To
Find
Select

Size to Fit Form
Switch Windows

Text Formatting

Site-Scale Habitat Suitability Worksheet

Site-Scale Habitat Suitability Worksheet
S-4 - Upland Summer/Late Brood-Rearing Habitat

Delete Close

Home Range: Test
Arid Site
Date: 3/24/2015

Evaluator(s): John Doe, Jane Doe
Add to Evaluators...
Add

Either type Investigator(s) above, or add names from the drop-down:

Sagebrush Cover: Marginal 14%
Sagebrush Height: Suitable 53cm
Perennial Grass/Forb Cover: Marginal 9%
Preferred Forb Availability: Unsuitable 0

Recalc from LPI and Species Richness...
Calculations based on same year as worksheet

Site-Scale Suitability: Marginal
Does Site potential limit Suitability: Unknown
Drought Condition: Mid-Range

Rationale for Overall Suitability Rating:

S-5: Select S-5 from the Monitoring tab and click Add New to begin filling out the form.

Click Recalc from LPI and Species Richness. If no data appears, ensure that the date matches the date in the LPI and Species Richness forms of interest and ensure that you have properly followed Step 1 (Import Sage Grouse Species and Groups). Using the HAF, determine if the site indicators are Suitable/Marginal/Unsuitable. Utilize the Notes and Rationale for Overall Suitability Rating boxes as needed. Close form when complete. Data will be automatically saved.

The screenshot shows the 'Site-Scale Habitat Suitability Worksheet' form within the 'DIMA Database' application. The form is titled 'S-5 - Riparian Summer/Late Brood-Rearing Habitat'. It includes fields for 'Home Range' (Test), 'Arid Site', 'Date' (2/16/2015), and 'Evaluator(s)' (Jane Doe, John Doe). There is a section for 'Site Type' (Riparian Areas) and a 'Recalc' button. The form also has dropdown menus for 'Riparian Stability' (Suitable), 'Preferred Forb Availability' (Unsuitable), 'Sagebrush Cover Availability' (Marginal), 'Site-Scale Suitability' (Marginal), and 'Drought Condition' (Mid-Range). A text box for 'Rationale for Overall Suitability Rating' is at the bottom. The application interface includes a menu bar with 'Data', 'Database Tools', and 'Add-Ins', and a toolbar with various functions like 'Ascending', 'Descending', 'New', 'Save', 'Find', 'Replace', 'Size to Fit', 'Switch Windows', and 'Text Formatting'.

Site-Scale Habitat Suitability Worksheet

S-5 - Riparian Summer/Late Brood-Rearing Habitat

Home Range: Test

Arid Site

Date: 2/16/2015

Evaluator(s): Jane Doe, John Doe

Either type Investigator(s) above, or add names from the drop-down:

Add to Evaluators...

Add

Site Type: Riparian Areas

Riparian Stability: Suitable

Preferred Forb Availability: Unsuitable

Sagebrush Cover Availability: Marginal

Site-Scale Suitability: Marginal

Drought Condition: Mid-Range

Rationale for Overall Suitability Rating:

Recalc from LPI and Species Richness...

0

14%

Calculations based on same year as worksheet

Num Lock Filter

S-6: Select S-6 from the Monitoring tab and click Add New to begin filling out the form.

Click Recalc from LPI and Species Richness. If no data appears, ensure that the date matches the date in the LPI and Species Richness forms of interest and ensure that you have properly followed Step 1 (Import Sage Grouse Species and Groups). Using the HAF, determine if the site indicators are Suitable/Marginal/Unsuitable. Utilize the Notes and Rationale for Overall Suitability Rating boxes as needed. Close form when complete. Data will be automatically saved.

The screenshot shows the 'Site-Scale Habitat Suitability Worksheet' form within the 'DIMA Database' application. The form is titled 'S-6 - Winter Habitat' and includes several input fields and buttons. The 'Home Range' field contains 'Test' and 'Arid Site'. The 'Date' field is set to '2/16/2015'. The 'Evaluator(s)' field contains 'John Doe, Jane Doe'. The 'Sagebrush Cover' dropdown is set to 'Marginal', 'Sagebrush Height' is 'Suitable', and 'Site-Scale Suitability' is 'Suitable'. A 'Recalc from LPI...' button is visible next to a '14%' value. The 'Rationale for Overall Suitability Rating' field is empty. The form has 'Delete' and 'Close' buttons at the top right. The application interface includes a menu bar with 'ernal Data', 'Database Tools', and 'Add-Ins', and a toolbar with various icons for filtering, sorting, and data entry.

ernal Data Database Tools Add-Ins

Filter Ascending Selection Descending Advanced Remove Sort Toggle Filter Sort & Filter

Records Refresh All Save Delete More

Find Replace Go To Select Find

Size to Fit Form Windows Switch Windows

Text Formatting

Site-Scale Habitat Suitability Worksheet

Site-Scale Habitat Suitability Worksheet

S-6 - Winter Habitat

Delete Close

Home Range: Test

Arid Site

Date: 2/16/2015

Evaluator(s): John Doe, Jane Doe

Either type Investigator(s) above, or add names from the drop-down.

Add to Evaluators...

Add

Sagebrush Cover: Marginal

14%

Recalc from LPI...

Sagebrush Height: Suitable

Calculation based on same year as worksheet

Site-Scale Suitability: Suitable

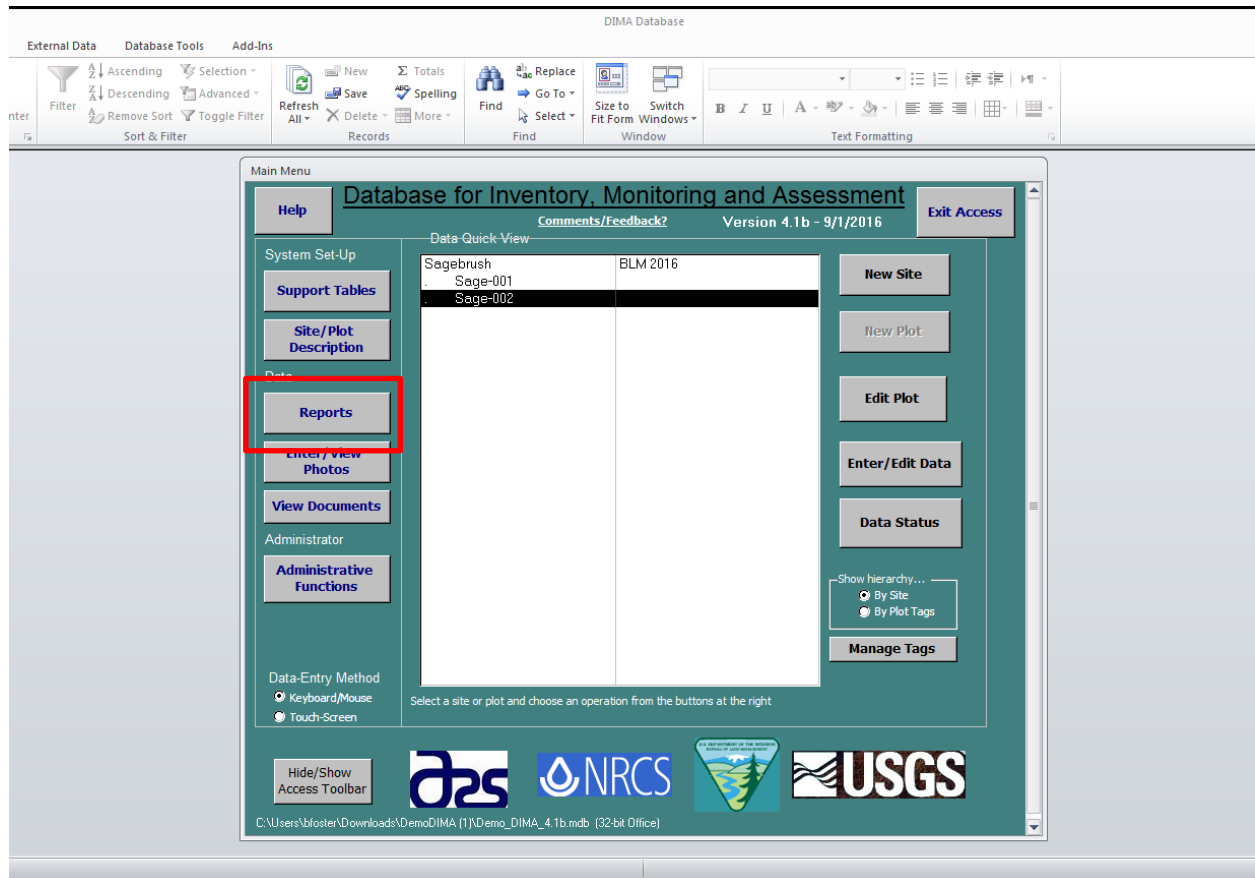
Rationale for Overall Suitability Rating:

Num Lock

Reports

Now that all of your forms are populated, you may run reports that will appear as Excel documents.

Step 1. Close the Sage-Grouse Habitat Monitoring forms and return to DIMA home screen. Click Reports



Step 2. Select Sage-Grouse Habitat from the **Select Method** box. Select the Site and Plot of interest. Now click the Select Reports tab

DIMA Database

Database Tools Add-Ins

Ascending Selection Refresh All New Save Totals Spelling Find Replace Go To Select Size to Fit Form Switch Windows Text Formatting

Report Manager

Report Level:
Selected Plot(s)

Select Date Range

Start Date: Jan 1 2015 End Date: Nov 1 2016

Select Method

Medium & High Intensity Ecol. Inv.
Method Tracking
Plant Density
Plant Production
Plot Definition
Rangeland Health Qual. Assess.
Sage-Grouse Habitat
Soil Compaction
Soil Stability

Select Sites/Plots/Lines Select Report

Select Site(s)

Sagebrush

Select Plot(s)

Sagebrush Sage-001
Sagebrush Sage-002

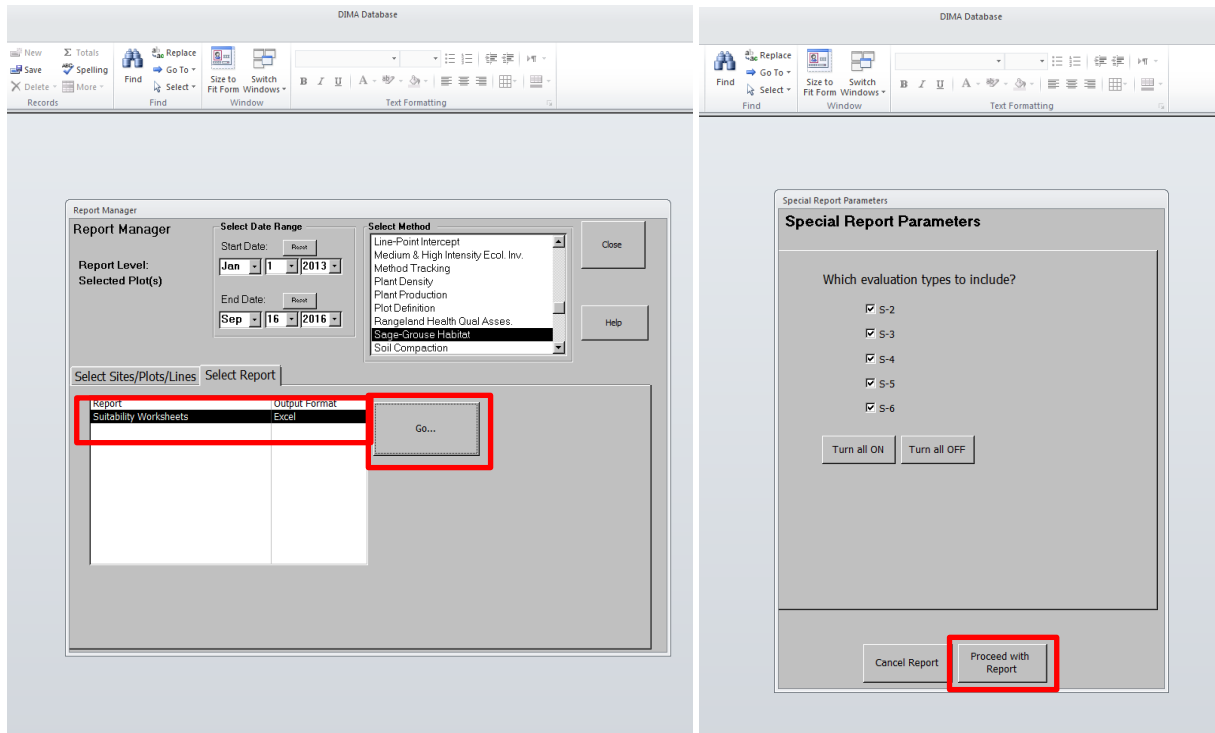
Data for this method is by Plot, not Line

All Reset All Reset

Top Level...
☒ By Site
☐ By Plot Tags

shift-click to select continuous range; ctrl-click to select individual items

Step 3. Click Suitability Worksheets then click Go... Determine the evaluation types of interest. Proceed with Report and click OK when the “Report will now be displayed” box appears



Step 4. Enjoy your reports



Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Add-Ins

Clipboard Font Alignment Number Conditional Formatting

A1 Form S-4: Sage-Grouse Site-Scale Habitat Suitability Worksheet - Upland Summer/Late Brood-Rearing Habitat

	A	B	C	D	E	F	G	H	I
1	Form S-4: Sage-Grouse Site-Scale Habitat Suitability Worksheet - Upland Summer/Late Brood-Rearing Habitat								
2	Site: Sagebrush	Plot: Sage-002							
3	Date: 3/24/2015	County: Owyhee	State: ID	Evaluators: John Doe, Jane Doe					
4	Population: 2			Home Range Name: Test					
5	Land Cover Type: sparse			Ecological Site: UNKNOWN					
6	Datum: NAD83 Zone:								
7	Transects	Start		End					
8	1								
9	2								
10	3								
11									
12	Habitat Indicator Suitability Range								
13	Habitat Indicator	/X	Suitable		Marginal		Unsuitable		
14	Sagebrush Cover (mean)	14%	10 to 25%		5 to <10% or >25%	*	<5%		
15	Sagebrush Height (mean)	53cm	40 to 80cm	*	20 to <40 or >80cm		<20cm		
16	Perennial Grass and Forb Cover (mean)	9%	>=15%		5 to <15%	*	<5%		
17	Preferred Forb Availability (relative to site potential)		common with appropriate numbers of species present		but only a few preferred species are present		Preferred forbs are rare	*	
18	Number of Preferred Forb Species (n)								

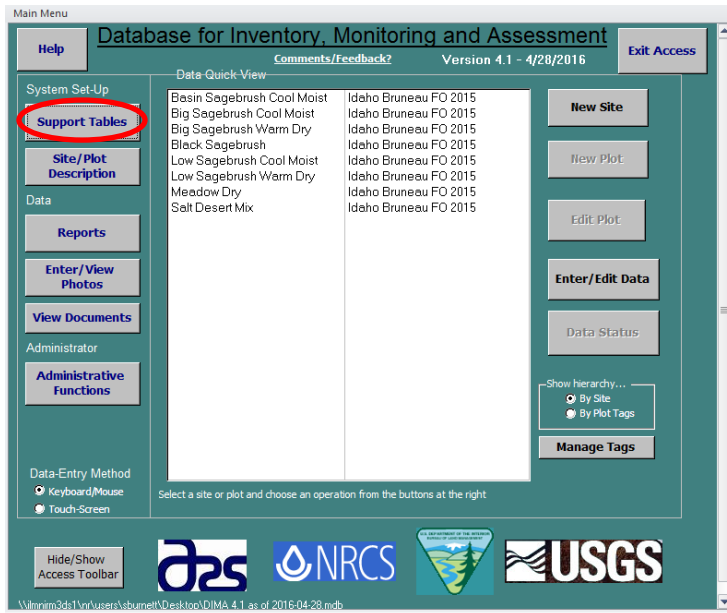
Metadata Species S-3 2-16-2015 S-5 2-16-2015 S-6 2-16-2015 **S-4 3-24-2015** S-2 10-31-2016 Calc Details Sheet2 Sheet3

Ready

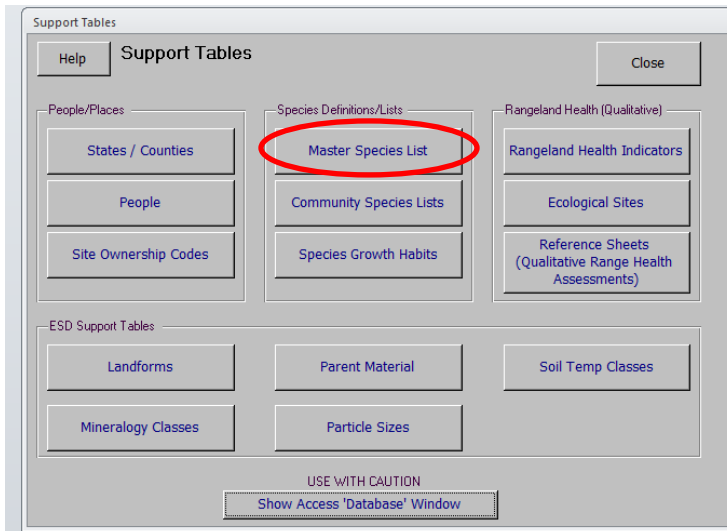
Appendix A

Importing Sage Grouse Species and Groups:

1. First click on the Support Tables button:



2. Then select the Master Species List button.



- Click on the Mass Import of Species Data button.

The screenshot shows the 'Master Species List' window. At the top, there is a search bar labeled 'Search by Scientific/Common name', a 'Show Genetic codes' button, and 'Delete All' and 'Close' buttons. Below this is a table with columns: Code, Scientific Name, Common Name, and Synonym of... The table lists various species codes and names, such as AAGG, ABCD, ABGR, ABIES, ABLA, ABLAL, ABME, ABRON, ABTH, ABUT1, ACAM, ACAR2, ACARQ2, ACBL, ACCD4, ACCDC3, ACER, and ACGL. Below the table, there is a note: 'Note: Species codes that are less than 4 characters will NOT be included in indicator calculations and reports.' At the bottom, there are four buttons: 'What does this mean?', 'Mass Import of Species Data...', 'Maintain special Species attributes', and 'Maintain Species Groups'. The 'Mass Import of Species Data...' button is circled in red. To the right of these buttons is a 'Species Notes' text area.

- Select the Mass Import of Sage Grouse Species/Groups tab

The screenshot shows the 'Mass Import of Species Data' window. At the top, there is a 'Close' button. Below it, there is a tabbed interface with two tabs: 'Mass Import of Plant Species (Excel)' and 'Mass Import of Sage Grouse Species/Groups'. The 'Mass Import of Sage Grouse Species/Groups' tab is selected and circled in red. Below the tabs, there is a text area with the following text: 'This function has only one purpose - to import the specially-formatted Excel file containing the Sage Grouse species codes and related Species Groups.' Below this text is a section labeled 'Identify Sage Grouse Species Excel File' with a 'Browse...' button and a text input field. Below the input field is a 'Do Import' button. At the bottom, there is a 'Species Notes' text area.

- Browse to the folder that DIMA 4.1 downloaded in and select the excel file labeled 'Import Sage Grouse species and groups'.
- Click Do Import.