

Integrated Waterbird Management & Monitoring (IWMM)

Documentation for IWMM Online Database – Part 2:



IWMM Download & Reporting Features



**January, 2017
(Last update May, 2018)**

Topics



- Review of IWMM Database and Definitions
- Downloads
 - Projects can download their available project data at any time
 - Some legacy data not available for downloads
 - Data cleared to level 5 publicly available for download
- Reporting
 - Basic reporting on all data types with the exception of some legacy data
 - Can export/download for incorporation into reports
 - Data cleared to level 2 and higher summarized in reports

Review of IWMM Database

- Online database, built by Point Blue Conservation Science
- A node of the *Avian Knowledge Network*
 - Projects and users must register
 - Data sharing governed by levels selected by Project Leaders
- Data entry
 - Bird survey data – counts and site conditions
 - Vegetation data – annual rapid assessment data
 - Management Actions – plans & reporting on habitat management actions
- Reporting
 - Basic reporting on all data types
 - Can export/download for incorporation into reports
- Data Downloads
 - Projects can download and export their data at any time

A note on login and user interface issues

- Users have reported the following issues:
 - From the dashboard, after navigating to a Project and selecting features such as Data Entry / Bird Survey, or Projects / Manage Units, etc., you are prompted to login again.
 - After navigating to the page you want to go to, you are not able to see recent updates or fixes, or complete certain tasks.
- These login issues may be a result of the FWS Chrome browser having a strong persistent cache and accessing an un-secure website pathway.
- First, make sure the URL you use begins with https. Then, please try clearing your cache if you experience login or user interface issues before submitting a help ticket.

Review of Definitions

- **Project** – a collection of survey units that are administered as a single unit (e.g., a single NWR)
- **Survey Unit** – a single management unit where sampling will occur
- **Sharing Level** – defined by AKN -
<http://www.avianknowledge.net> then go to Data, Data Access
 - Note IWMM_Data_Sharing_Policy differs slightly from **AKN policy**
- **Legacy Data** – data collected prior to July 2015 with earlier version of protocol. May include some site conditions.
- **Current protocol** – protocol version released for use. Includes ALL site conditions.

Downloads

Project Data Download

Choose the type of data you wish to download:

- Bird Survey
- Vegetation Survey
- Management Actions

Filter by Project & Locations:

Chose a project from the drop down list below. The locations that co projects you have selected are listed next to the projects list. Either locations to refine your results, or choose "All Locations" to retrieve

MATTAMUSKEETNWR

- All Locations
- Specific Locations >

- NC-006-G - MI-6
- NC-006-H - MI-8W
- NC-006-I - MI-8E
- NC-006-J - MI-9
- NC-006-K - MI-10S
- NC-006-L - MI-10N
- NC-006-M - MI-7

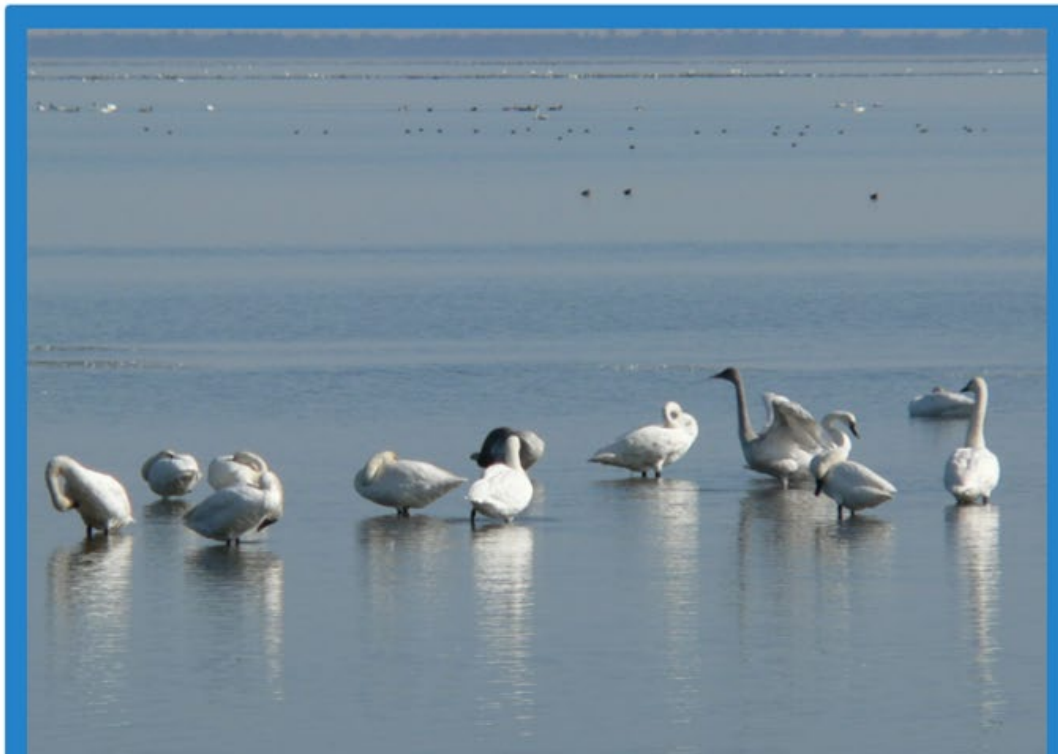
Project	Location	Location F	Protocol	Date	Start Time	End Time	Bird Coun	Bird Code	Common	Scientific	Observer	# Other O	Other Obs	Data Shari	No Specie	Event Not
TEST_NWITT-002	Pond 1	IWMM_Gr	11/5/2010	9:15	9:27	0	WISN	Wilson's S	Gallinago	Smith, Joe				AVAILABL	0	
TEST_NWITT-002	Pond 1	IWMM_Gr	12/2/2010	12:14	12:16	0	n/a	n/a	n/a	Smith, Joe				AVAILABL	1	
TEST_NWITT-002	Pond 1	IWMM_Gr	3/12/2012	10:57	11:35	4	AMWI	American	Anas ame	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	3/12/2012	10:57	11:35	34	GADW	Gadwall	Anas strej	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	3/12/2012	10:57	11:35	15	GWTE	Green-wir	Anas crecc	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	3/12/2012	10:57	11:35	8	NSHO	Northern	Anas clypt	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	3/12/2012	10:57	11:35	2	WODU	Wood Duc	Aix spons	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	4/3/2012	11:55	11:57	1	GBHE	Great Blue	Ardea her	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	3/1/2012	10:31	10:42	10	MALL	Mallard	Anas platy	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	3	CANG	Canada G	Branta car	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	4	GADW	Gadwall	Anas strej	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	35	GWTE	Green-wir	Anas crecc	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	7	KILL	Killdeer	Charadriu	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	95	MALL	Mallard	Anas platy	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 1	IWMM_Gr	2/10/2012	10:00	10:25	24	WODU	Wood Duc	Aix spons	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 2	IWMM_Gr	3/1/2012	11:04	11:15	0	GBHE	Great Blue	Ardea her	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 2	IWMM_Gr	3/23/2011	9:45	9:53	3	NSHO	Northern	Anas clypt	Smith, Joe				AVAILABL	0	NA
TEST_NWITT-002	Pond 2	IWMM_Gr	4/3/2012	12:13	12:25	0	GBHE	Great Blue	Ardea her	Smith, Joe				AVAILABL	0	NA

- Data can be downloaded for Bird Surveys, Vegetation Surveys and Management Actions as an Excel compatible data sheet (CSV)

2 Site (Project): MATTAMUSKEETNWR

Project Dashboard

1 Select Site (Project): MATTAMUSKEETNWR ▾



Who Are We



Managers and scientists working together to optimally manage lands for waterbirds.

- Users must be associated with a project (e.g., Project Leader or Researcher status) in order to download project data
 1. From Project Dashboard, select project from dropdown list for which you wish to download data
 2. From menu tabs (black bar) click “Downloads”

Downloading Data: specifying criteria

All Data Types – can filter by Project & Location (Unit):

Integrated Waterbird Management & Monitoring

Project Data Download

Choose the type of data you wish to download:

Bird Survey Vegetation Survey Management Actions

Filter by Project & Locations:

Choose a project from the drop down list below. The locations that correspond to the projects you have selected are listed next to the projects list. Either choose specific locations to refine your results, or choose "All Locations" to retrieve all project data.

DUMBIO
GRANDCOTENWR
HATCHIENWR
MATTAMUSKEETNWR
WINFIELD

NC-006-A - MI-1
NC-006-ALL - ALL IMPOUNDMENTS
NC-006-B - MI-2W
NC-006-C - MI-2E
NC-006-D - MI-3
NC-006-E - MI-4
NC-006-ELAKE - Mattamuskeet Lake
NC-006-F - MI-5
NC-006-FA-1 - Farm Area 1
NC-006-FA-2 - Farm Area 2
NC-006-G - MI-6
NC-006-H - MI-8W
NC-006-I - MI-8E
NC-006-J - MI-9
NC-006-K - MI-10S
NC-006-L - MI-10N

All Locations
Specific Locations >

• Project List

• Unit List

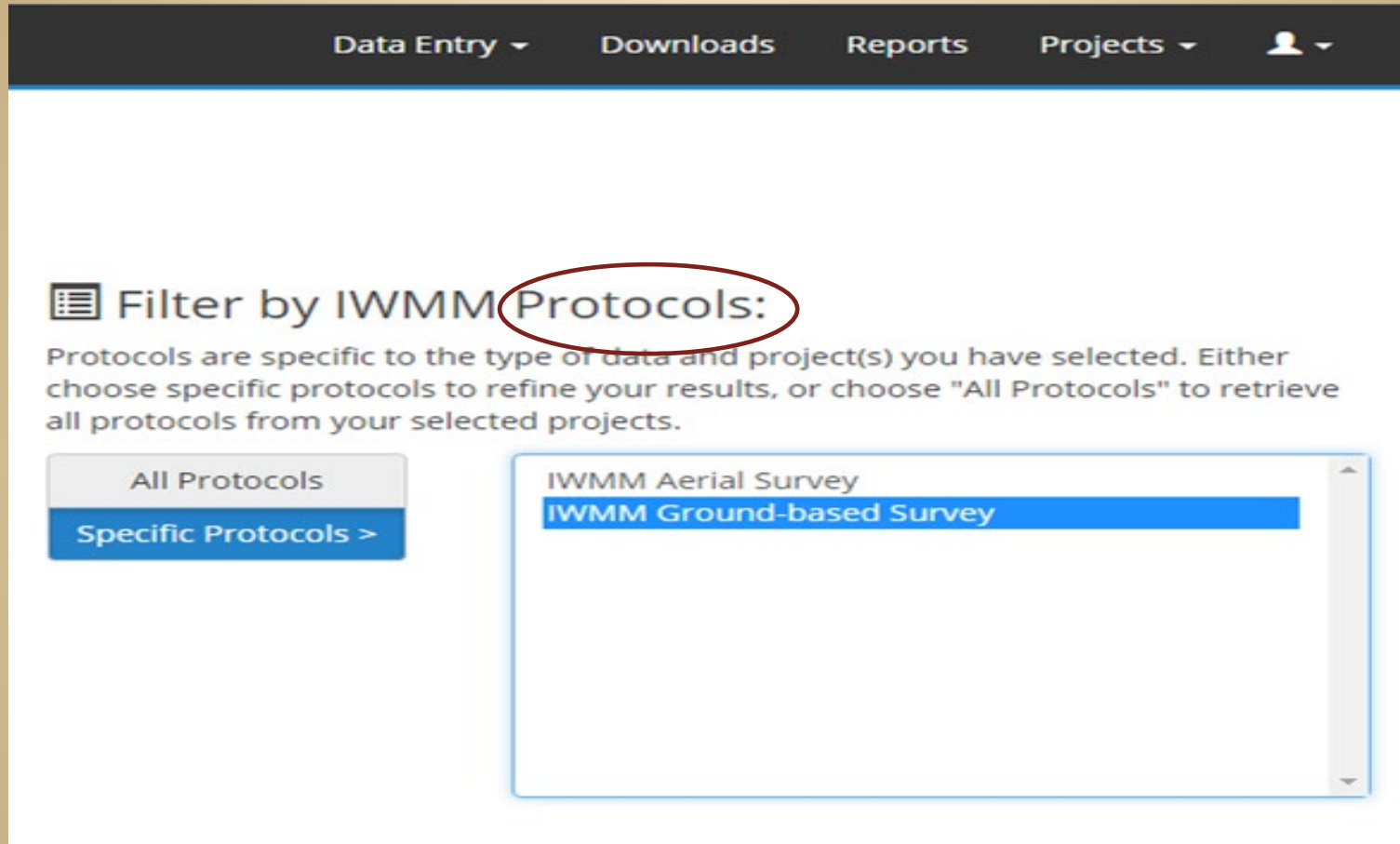
- Select Project from dropdown list: “MATTAMUSKEETNWR”
 - Can change project selected here at any time
 - If you are Project Leader for more than one project, you can select more than one project at a time
- To download data for all associated project locations (units), click “All Locations”
- For specific units, select one or more units from unit dropdown list

All Data Types – can filter by Date

The screenshot displays a web application interface for filtering data. At the top, there is a navigation bar with 'Data Entry', 'Downloads', and 'Reports'. Below this, a 'Filter by Dates' section is shown. It includes a calendar icon and the text 'Filter by Dates: Select a start and/or end date to filter results, or "All Dates" to get all project data.' There are three main options: 'All Dates', 'Start Date', and 'End Date'. The 'All Dates' option is highlighted in blue. A 'Date Range >' button is also present. A calendar pop-up is shown, with 'November 2016' selected and circled in red. A red '1' is placed next to the calendar. To the right, another calendar shows the year '2016' selected, with a red '2' next to it. Below that, a third calendar shows the year range '2010-2019' with '2016' selected, and a red '3' next to it.

- Choose “All Dates” to download all observations
- Choose “Date Range” and select from calendar to download observations collected over specific time
- Click on the month (e.g. November 2016) to display additional months and years

Bird Survey Data – can also filter by Protocol:



The screenshot shows a web application interface with a dark navigation bar at the top containing the following items: "Data Entry" with a dropdown arrow, "Downloads", "Reports", "Projects" with a dropdown arrow, and a user profile icon with a dropdown arrow. Below the navigation bar, the main content area has a heading "Filter by IWMM Protocols:" where the word "Protocols" is circled in red. Underneath the heading is a paragraph: "Protocols are specific to the type of data and project(s) you have selected. Either choose specific protocols to refine your results, or choose 'All Protocols' to retrieve all protocols from your selected projects." To the left of the dropdown menu are two buttons: a grey button labeled "All Protocols" and a blue button labeled "Specific Protocols >". To the right is a dropdown menu with a blue border and a scroll bar, containing two options: "IWMM Aerial Survey" and "IWMM Ground-based Survey", with the latter selected and highlighted in blue.

- Choose “All Protocols” for data collected under all protocols
- Choose “Specific Protocols” and select from dropdown list for data collected under specific protocol(s)

Bird Survey Data – can also filter by Species Observed:

Filter by Species Observed:

Choose species to refine your results, or select "All Species" to retrieve all observed species from the selected project. Only those species that have been observed shown in this list.

All Species

Specific Guilds >

Specific Species >

GWFG - Greater White-fronted Goose

SNGO - Snow Goose

CANG - Canada Goose

WODU - Wood Duck

Download Data:

Click "Download to CSV" to generate an Excel compatible data sheet filtered by the options that matches your specified criteria.

Download to CSV

- For all species, select “All Species”
- For ≥ 1 specific species, select species from drop down list

Bird Survey Data – can also filter by Species Observed / Guilds

Filter by Species Observed:

Choose species to refine your results, or select "All Species" to retrieve all observed species from the selected project. Only those species that have been observed shown in this list.

All Species

Specific Guilds >

Specific Species >

Larids

Marshbirds (Breeding)

Marshbirds (Non-breeding)

Non-waterfowl open-water species

BOGU - Bonaparte's Gull

LAGU - Laughing Gull

FRGU - Franklin's Gull

HEEG - Heermann's Gull

Download Data:

Click "Download to CSV" to generate an Excel compatible data sheet filtered by the options that matches your specified criteria.

Download to CSV

- Guild
- Dropdown list for guild

- For a specific guild, select “Specific Guilds”
 - Within the guild you can also filter by 1 or more species by selecting from the dropdown list for the guild selected.

Bird Survey Download

Download to CSV

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC		
	Project	Location	Location	Full	Date	Start	End	Bird	Bird	Common	Scientific	Observer	# Other	Other	Data	No	Species	Event	Notes	Notes	Starting	Wind	Temp	Gauge	Gauge	Flood	Ice	Dry	Mud	0-4 in	4-12 in
1	Example	XX-000	LM6	IWMM_G	#####	#####	#####	275	ABDU	American	Anas rubr	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
2	Example	XX-000	LM6	IWMM_G	#####	#####	#####	4	CANG	Canada G	Branta cai	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
3	Example	XX-000	LM6	IWMM_G	#####	#####	#####	1150	GWTE	Green-win	Anas creci	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
4	Example	XX-000	LM6	IWMM_G	#####	#####	#####	335	MALL	Mallard	Anas platy	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
5	Example	XX-000	LM6	IWMM_G	#####	#####	#####	13	NOPI	Northern f	Anas acut	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
6	Example	XX-000	LM6	IWMM_G	#####	#####	#####	7	NSHO	Northern f	Anas clypi	Smith, Joe			AVAILAB	0					2	53	5	383	1	0	0	40	10	10	2
7	Example	XX-000	LM6	IWMM_G	#####	#####	#####	185	ABDU	American	Anas rubr	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
8	Example	XX-000	LM6	IWMM_G	#####	#####	#####	13	CANG	Canada G	Branta cai	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
9	Example	XX-000	LM6	IWMM_G	#####	#####	#####	2	GBHE	Great Blue	Ardea heri	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
10	Example	XX-000	LM6	IWMM_G	#####	#####	#####	1160	GWTE	Green-win	Anas creci	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
11	Example	XX-000	LM6	IWMM_G	#####	#####	#####	350	MALL	Mallard	Anas platy	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
12	Example	XX-000	LM6	IWMM_G	#####	#####	#####	2	MUSW	Mute Swai	Cygnus oli	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
13	Example	XX-000	LM6	IWMM_G	#####	#####	#####	12	NOPI	Northern f	Anas acut	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
14	Example	XX-000	LM6	IWMM_G	#####	#####	#####	16	NSHO	Northern f	Anas clypi	Smith, Joe			AVAILAB	0					1	61	5	383	1	4	0	40	15	10	1
15	Example	XX-000	LM6	IWMM_G	#####	#####	#####	153	ABDU	American	Anas rubr	Smith, Joe			AVAILAB	0					1	47	5	383	1	4	0	60	0	10	1
16	Example	XX-000	LM6	IWMM_G	#####	#####	#####	11	CANG	Canada G	Branta cai	Smith, Joe			AVAILAB	0					1	47	5	383	1	4	0	60	0	10	1

- Contains **bird survey** and **unit condition** data for terms specified
- Includes both **legacy data** and data collected under **current protocol**

Bird Survey Download: Unit Conditions data

Download to CSV

- Because unit conditions protocol were revised in 2015, data collected under historical and current protocols are displayed separately

Data via historical site conditions protocol: **columns S – AG.**

	A	B	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
1	Project	Location Name	Wind (0-6)	Starting Temp (F)	Tide	Gauge level	Gauge units	Flood Duration	Ice Cover	Dry	Mud	0-4 in flooded	4-12 in flooded	12-48 in flooded	Over 48 in flooded	Disturb Severity	Disturbance Source
2	Example	XX-000	2	53	5	383.4	1	0	0	40	10	10	20	15	5	2	7
3	Example	XX-000	2	53	5	383.4	1	0	0	40	10	10	20	15	5	2	7
4	Example	XX-000	2	53	5	383.4	1	0	0	40	10	10	20	15	5	2	7
5	Example	XX-000	2	53	5	383.4	1	0	0	40	10	10	20	15	5	2	7

Data via current site conditions protocol: **columns AH – BO.**

	A	B	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	▲
1	Project	Location Name	Starting Temp (F)	Wind (0-6)	Visibility	Tide Stage	Salinity (ppt)	Gauge level	Gauge units	Dry	Mud	0-5 cm floo	5-15 cm floo	15-25 cm floo	>25 cm floo	Esti mat	Ice Cover	Flood Durati on	Assess ment Meth	Open Water	Scrub Shrub	Forest	Emer gent	Bare Ground	Inter spon sion	Distur b Severi ty	Disturb ance Source	Chronic Disturba nce	< 2.5cm	2.5 to 15cm	30	
968	Example	XX-000	78	4	90	9	9	0	382.4	1	60	1	2	5	10	22	2	0	1	2	20	40	5	30	5	L	1	0	4	0	1	
969	Example	XX-000	78	4	90	9	9	0	382.4	1	60	1	2	5	10	22	2	0	1	2	20	40	5	30	5	L	1	0	4	0	1	
970	Example	XX-000	78	2	90	9	9	0	382.1	1	60	10	10	5	5	10	2	0	1	2	20	40	5	25	10	L	1	0	4	0	1	
971	Example	XX-000	78	2	90	9	9	0	382.1	1	60	10	10	5	5	10	2	0	1	2	20	40	5	25	10	L	1	0	4	0	1	

Vegetation Survey Download

Download to CSV

1	Project	Location Name	Location Full Name	Protocol	Date	Start Time	End Time	Scientific Name	Plant Code	Common Name	Percent Coverage	Seed Head Size	Seed Head Density	Near Tall Edge Pct	Emergent Pct	Visibility Pct	Observer Name	# Other Observers	Other Observer Names	Data Sharing Level	Event Notes	Notes
2	Example	TT-000	MXU 3	IWMM_Veg	#####	13:00	13:21	Echinochloa	ECCR	barnyardgrass	60	L	H	7	100	100	Smith, Joe	0		CLEAN		
3	Example	TT-000	MXU 3	IWMM_Veg	#####	13:00	13:21	Polygonum	POLA4	curlytop knotweed	5	A	L	7	100	100	Smith, Joe	0		CLEAN		
4	Example	TT-000	MXU 3	IWMM_Veg	#####	13:00	13:21	Polygonum	POPE2	Pennsylvania smartweed	10	A	M	7	100	100	Smith, Joe	0		CLEAN		
5	Example	TT-000	MXU 3	IWMM_Veg	#####	13:00	13:21	Leptochloa	LEPA3	Amazon smartweed	25	A	H	7	100	100	Smith, Joe	0		CLEAN		
6	Example	TT-000	MXU 3	IWMM_Veg	#####	13:00	13:21	Eleocharis	ELPA3	common smartweed	20	A	NA	7	100	100	Smith, Joe	0		CLEAN		
7	Example	TT-000	MXU 9	IWMM_Veg	#####	9:50	10:00	Polygonum	POAME	water knotweed	20	NA	NA	18	85	100	Smith, Joe	2	Doe, Jane	CLEAN		
8	Example	TT-000	MXU 9	IWMM_Veg	#####	9:50	10:00	Xanthium	XAST	rough cockle	30	NA	NA	18	85	100	Smith, Joe	2	Doe, Jane	CLEAN		
9	Example	TT-000	MXU 9	IWMM_Veg	#####	9:50	10:00	Ipomoea	IPLA	whitestar	30	NA	NA	18	85	100	Smith, Joe	2	Doe, Jane	CLEAN		
10	Example	TT-000	MXU 9	IWMM_Veg	#####	9:50	10:00	Amaranth	AMTU	roughfruit	30	NA	NA	18	85	100	Smith, Joe	2	Doe, Jane	CLEAN		
11	Example	TT-000	MXU 9	IWMM_Veg	#####	9:50	10:00	Convolvul	COAR4	field bindweed	10	NA	NA	18	85	100	Smith, Joe	2	Doe, Jane	CLEAN		
12	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Echinochloa	ECCR	barnyardgrass	40	A	M	13	98	100	Smith, Joe	0		CLEAN		
13	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Polygonum	POLA4	curlytop knotweed	10	A	M	13	98	100	Smith, Joe	0		CLEAN		
14	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Polygonum	POPE2	Pennsylvania smartweed	10	A	M	13	98	100	Smith, Joe	0		CLEAN		
15	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Leptochloa	LEPA3	Amazon smartweed	15	A	H	13	98	100	Smith, Joe	0		CLEAN		
16	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Eleocharis	ELPA3	common smartweed	20	NA	NA	13	98	100	Smith, Joe	0		CLEAN		
17	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Polygonum	POHY2	swamp smartweed	5	A	NA	13	98	100	Smith, Joe	0		CLEAN		
18	Example	TT-000	MXU 5	IWMM_Veg	#####	13:25	13:42	Polygonum	POAME	water knotweed	15	A	M	13	98	100	Smith, Joe	0		CLEAN		
19	Example	TT-000	MXU 7	IWMM_Veg	#####	10:30	11:30	Polygonum	POPE2	Pennsylvania smartweed	25	A	H	9	95	80	Smith, Joe	0		CLEAN		
20	Example	TT-000	MXU 7	IWMM_Veg	#####	10:30	11:30	Polygonum	POLA4	curlytop knotweed	50	L	M	9	95	80	Smith, Joe	0		CLEAN		

- Contains vegetation survey data for terms specified
- Downloads **do not include legacy data** due to significant changes in habitat protocol.
 - For access to legacy vegetation data contact IWMM Staff

Management Actions Download

Download to CSV

The screenshot shows a Microsoft Excel spreadsheet titled "MgmtEvtActionActuals_Dwnld_12_05_16". The spreadsheet contains a table with the following columns: Project, Mgmt Action Name, Mgmt Action Category, Mgmt Action Description, Location Name, Location Full Name, Start Date, End Date, Planned Start Date, Percent Affected, Event Year, Event Name, and Event Description. The data rows show various management actions such as "active draw down pumped" and "water level maintenance" across different projects and locations.

1	Project	Mgmt Action Name	Mgmt Action Category	Mgmt Action Description	Location Name	Location Full Name	Start Date	End Date	Planned Start Date	Percent Affected	Event Year	Event Name	Event Description
2	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-E	MZ-4	4/4/2016	4/14/2016	4/1/2016	100	2016	2016SEBDT_D (2016)	SUMMARY: Early-season drawdown to below
3	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-J	MZ-9	4/4/2016	5/9/2016	4/1/2016	100	2016	2016SEBDT_D (2016)	SUMMARY: Early-season drawdown to below
4	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-H	MZ-8W	4/4/2016	5/15/2016	4/1/2016	100	2016	2016SEBDT_MC (2016-	SUMMARY: Early season drawdown to below
5	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-M	MZ-7	4/4/2016	4/5/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
6	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-E	MZ-4	4/20/2016	9/7/2016	5/15/2016	100	2016	2016SEBDT_D (2016)	SUMMARY: Early-season drawdown to below
7	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-I	MZ-8E	5/5/2016	6/17/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
8	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-H	MZ-8W	5/15/2016	9/7/2016	5/15/2016	100	2016	2016SEBDT_MC (2016-	SUMMARY: Early season drawdown to below
9	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-J	MZ-9	5/24/2016	9/8/2016	5/15/2016	100	2016	2016SEBDT_D (2016)	SUMMARY: Early-season drawdown to below
10	Example	wat10	water level	flood up pumped (<3000 -18,000 GPM	TT-006-M	MZ-7	5/24/2016	5/26/2016	9/15/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
11	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-B	MZ-2W	6/21/2016	7/6/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
12	Example	che2	chemical	aerial spray	TT-006-H	MZ-8W	6/27/2016	6/27/2016	6/1/2016	100	2016	2016SEBDT_MC (2016-	SUMMARY: Early season drawdown to below
13	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-H	MZ-8W	6/27/2016	6/27/2016	5/15/2016	100	2016	2016SEBDT_MC (2016-	SUMMARY: Early season drawdown to below
14	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-C	MZ-2E	6/27/2016	7/1/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
15	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-F	MZ-5	7/5/2016	9/6/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
16	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-G	MZ-6	7/6/2016	8/11/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
17	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-B	MZ-2W	7/6/2016	7/12/2016	7/15/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
18	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-C	MZ-2E	7/12/2016	8/10/2016	7/15/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
19	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-K	MZ-10S	8/4/2016	9/7/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
20	Example	wat2	water level	active draw down pumped (3000 -18	TT-006-L	MZ-10N	8/4/2016	9/7/2016	6/1/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI
21	Example	wat24	water level	water level maintenance (3000 -18,0	TT-006-I	MZ-8E	8/4/2016	9/7/2016	7/15/2016	100	2016	2016SLDT_NA (2016-2)	SUMMARY: Late season drawdown to ditchtop. 1. PI

- Contains management actions data for terms specified
- Contains description of management actions employed
- Tracks percent of unit affected over treated time period.

Reports

Site (Project): CYPRESS_CREEK_NWR

Project Dashboard

Select Site (Project): CYPRESS_CREEK_NWR ▾



Who Are We



Managers and scientists working together to optimally manage lands for waterbirds.

- From Project Dashboard, click “Reports”
 - Note: *Data cleared to appropriate status are available for inclusion in reports the day after they are entered, after 12 noon Pacific Time*

Reports Types include:

Integrated Waterbird Management & Monitoring

Data Entry ▾ Downloads Reports Projects ▾

Site (Project): CYPRESS_CREEK_NWR

Generate Reports

Report Type

Bird Survey Unit Conditions Bird Use Days Vegetation Survey Report Output Description

Location

Locations can be specified by project or region. If using projects, select one or more projects to include all locations within those projects in the report. Optionally, select locations from the projects selected to include only those locations in the report. If using a region, select a single region to include all locations within that region in the report.

Projects Regions

CHESAPEAKE_BAY_ENVIRO_CTR
CHINCOTEAGUENWR

Bellrose 1
Bellrose 2

Protocols

Filter results to show only those matching one or more protocols you select.

All Protocols Specific Protocols

IWMM_AerialSurvey
IWMM_FlushCount
IWMM_GroundAerialSurvey
IWMM_GroundSurvey

- **Bird Survey:** Summary of visits, # of total birds, # taxa, # of individuals by species, etc.
- **Unit Conditions:** Min, max, median, mean, s.d. of 5 parameters
- **Bird Use Days:** Estimates total number of birds to use a unit over a specified time period (2 methods of estimation)
- **Vegetation Survey:** Plant taxa identified, Seed Production Index, percent cover, etc.

Understanding & Interpreting Reports

Generate Reports

Report Type

Bird Survey

Unit Conditions

Bird Use Days

Vegetation Survey

[Report Output Description](#)

Bird Survey Report Help

The Bird Observations report produces a description of each bird survey event and its sampling effort. It includes the following outputs:

- A summary table of number of visits, total number of birds counted, total number of taxa detected, and a diversity index (explained below) for the locations, dates, and taxa selected. Each row reports the data for each unit and month in the selection. The output of this table ignores information about the grouping of the report, as it is intended to help the user review the completeness and accuracy of the data.
- A report table of the total number of birds counted, relative frequency of each taxon counted (the number of individuals in a taxon counted divided by the total number of birds in all taxa counted in the survey event), average number of individuals counted per survey event, maximum number of individuals counted at an event, birds counted per hour, and birds counted per hectare (provides an estimate of a taxon's density in a unit - i.e., total counted divided by area surveyed). Estimates are provided by taxon (guild or species) and spatial group (date or year). That is, each row is a different taxon and date/year. This table shows the data based on the grouping selection made by the user (unit or project, date or year).

If a pivot table is requested, then the report table is simplified to include only the total of counts for each taxon. In the pivot table, each row is a different taxon, and each column is a different date/year.

The diversity index is the exponential value of the Shannon:

$$DiversityInd = \exp[-1 * \sum p_i * \log(p_i)]$$

In the above equation, p_i represents the proportion of counts for species i in the sample:

$$p_i = \text{counts for species } i / \text{total counts}$$

- For a detailed description of each report type, output and values generated, select **Report Type** & click **Report Output Description**.

Bird Survey Report

Generating a Bird Survey Report: Specify Criteria

Integrated Waterbird Management & Monitoring

Data Entry ▾ Downloads Reports Projects ▾

Report Type

Bird Survey Unit Conditions Bird Use Days Vegetation Survey [Report Output Description](#)

Location

Locations can be specified by project or region. If using projects, select one or more projects to include all locations within those projects in the report. Optionally, select locations from the projects selected to include only those locations in the report. If using a region, select a single region to include all locations within that region in the report.

Projects Regions

MALINMOR_HUNT_CLUB
MALLARD_POINT
MANNINGTON
MANSTON_MARSH_WMA
MARGATE
MARPLE_WMA
MASONNECKNWR
MATTAMUSKEETNWR

1
2
3
4
5
6
7
8

Select all Deselect all

Protocols

Filter results to show only those matching one or more protocols you select.

All Protocols **Specific Protocols**

IWMM_AerialSurvey
IWMM_FlushCount
IWMM_GroundAerialSurvey
IWMM_GroundSurvey

Species

Select one or more species. You may also filter by one or more guilds, and optionally one or more species within those guilds. Species are listed in taxonomical order.

All Species **Guilds** Species

Larids
Marshbirds (Breeding)
Marshbirds (Non-breeding)
Non-waterfowl open-water species
Shorebirds
Wading Birds
Waterfowl

BBWD - Black-bellied Whistling-Duck
FUWD - Fulvous Whistling-Duck
GWFG - Greater White-fronted Goose
UNGO - Unid. Goose
SNGO - Snow Goose
BLGO - Blue Goose
RSGO - Snow/Blue/Ross's Goose
ROGO - Ross's Goose

Select all Deselect all

Dates

Filter results to show only those within the specified date range.

All Dates **Date Range**

Start Date End Date

Apply user defined period ?

- As in Downloads, reports can be generated by filtering Location, Protocol, Species, and Dates.

Bird Survey Report: Specify Grouping Options

Results Grouping

The results will be grouped according to your selection here

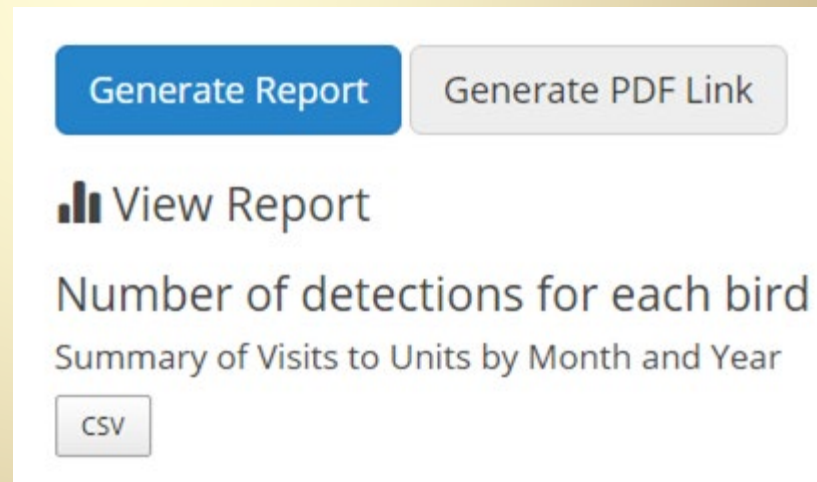
<input checked="" type="checkbox"/> Units	<input type="checkbox"/> Projects	<input checked="" type="checkbox"/> Date	<input type="checkbox"/> Year
---	-----------------------------------	--	-------------------------------

Include pivot table

- Specify how results are grouped based on selection of units or projects with date or year.
- Pivot Table: Select to simplify table to include only the total of counts for each taxon.

Bird Survey Report: Data and Format Availability

- Incorporates:
 - Legacy data
 - Data collected under current protocol
- Formats:
 - Interactive viewing
 - Downloads
 - CSV file
 - PDF file



Example Bird Survey Report: Tables

View Report

Number of detections for each bird species, for each date or year, and management unit or project.

Summary of Visits to Units by Month and Year

CSV

Project	Unit	Year	Month	NumVisits	TotalBirdCount	TotalTaxa	DiversityInd
Clarence Cannon NWR	14B-16	2011	8	1	0	0	0
Clarence Cannon NWR	14B-16	2011	9	3	0	0	0
Clarence Cannon NWR	14B-16	2011	10	3	0	0	0
Clarence Cannon NWR	14B-16	2011	11	5	0	0	0
Clarence Cannon NWR	14B-16	2011	12	4	0	0	0
Clarence Cannon NWR	14B-16	2012	1	4	0	0	0
Clarence Cannon NWR	14B-16	2012	2	4	108	3	1.37
Clarence Cannon NWR	14B-16	2012	3	5	0	0	0
Clarence Cannon NWR	14B-16	2012	4	4	0	0	0
Clarence Cannon NWR	14B-16	2012	5	1	0	0	0

Showing 1 to 10 of 637 entries

Previous 1 2 3 4 5 ... 64 Next

- **Summary of visits info:** number of visits, total number of birds counted, total number of taxa observed, and a diversity index

Example Bird Survey Report: Tables

Summary of Bird Observations

CSV

Unit	Date	Species	Count	RelFrequency	avgCount	maxCount	BirdsPerHour	BirdsPerHectare
14B-16	2012-02-08	Canada Goose	5	0.0463	5	5	100	0
14B-16	2012-02-08	Greater White-fronted Goose	3	0.0278	3	3	60	0
14B-16	2012-02-08	Mallard	100	0.9259	100	100	2000	0.06
14B-16	2013-03-29	Killdeer	4	1	4	4	80	0
14C	2011-08-12	Great Blue Heron	1	1	1	1	30	0.01
14C	2011-09-01	Killdeer	1	1	1	1	30	0.01
14C	2013-03-15	Mallard	2	1	2	2	8	0.01
14C	2013-03-22	Canada Goose	1	0.0015	1	1	4	0.01

- **Summary of bird observations:** total for each species counted, relative frequency, average and max counts, birds counted per hour and per hectare.

Example Bird Survey Report: Tables

Summary of Bird Observations

CSV

Species ▲	14B- 16:2012- 02-08	14C:2013- 03-15	14C:2013- 03-22	14C:2013- 03-29	14C:2013- 04-03	Big Pond:2010- 10-06	Big Pond:2010- 10-18	Big Pond:2010- 10-21	Big Pond:2010- 10-25	Big Pond:2010- 10-27
Green-winged Teal	0	0	2	26	5	0	80	400	100	500
Hooded Merganser	0	0	0	0	0	0	0	0	0	0
Lesser Scaup	0	0	0	0	0	0	0	0	0	0
Mallard	100	2	631	138	3	0	500	1100	2000	1500
Northern Pintail	0	0	30	2	0	0	20	200	2000	1500
Northern Shoveler	0	0	0	0	0	0	0	100	100	100

- Pivot table for bird observations:** Simplified report table with the total of counts for each taxon. Each column is for each unit by each survey date/year. Example report filtered by guild.

Unit Condition Report

Generating a Unit Conditions Report: Specify Criteria

Integrated Waterbird Management & Monitoring Data Entry ▾ Downloads Reports

Site (Project): CL

Generate Reports

Report Type

Bird Survey **Unit Conditions** Bird Use Days Vegetation Survey [Report Output Description](#)

Location

Locations can be specified by project. Select one or more projects to include all locations within those projects in the report. Optionally, select locations from the projects selected to include only those locations in the report.

Projects

CATTUS_ISLAND_PARK CEDAR_BONNET_ISLAND CEDAR_RUN_BOG CEDAR_RUN_DOCK_ROAD CHESAPEAKE_BAY_ENVIRO_CTR CHINCOTEAGUENWR CHOKIO_WPA CLARENCECANNONNWR	14B-16 14C Big Pond Buttonbrush Pond Crane Pond Display pond Goose Pasture MSU 1
--	---

Dates

Filter results to show only those within the specified date range.

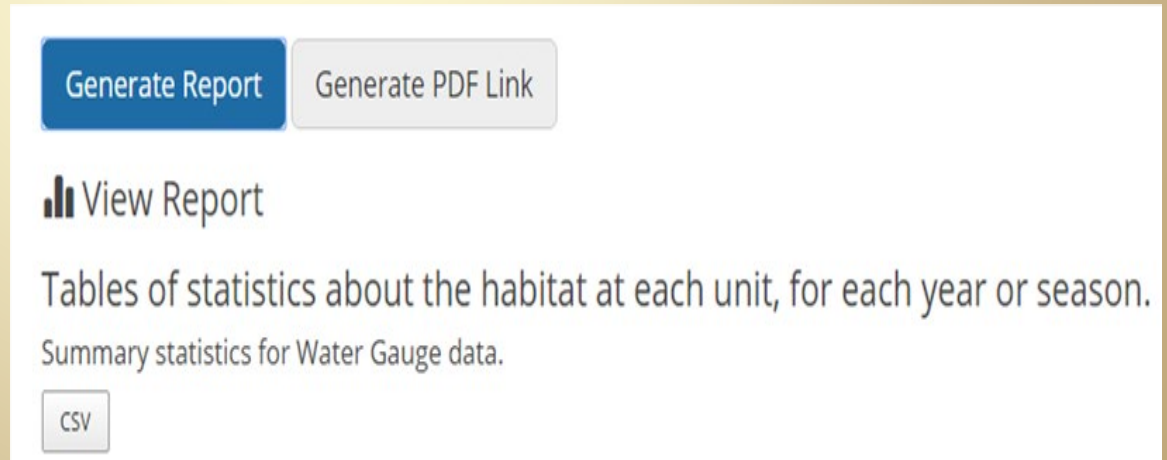
Start Date **End Date**

Apply user defined period ⓘ

- Can filter by Location and Date

Unit Conditions Report: Data and Format Availability

- Incorporates:
 - Data collected under current protocol
- Formats:
 - Interactive viewing
 - Downloads
 - CSV file
 - PDF file



The screenshot shows a user interface for generating a report. At the top, there are two buttons: a blue "Generate Report" button and a grey "Generate PDF Link" button. Below these is a section titled "View Report" with a bar chart icon. The text below the title reads: "Tables of statistics about the habitat at each unit, for each year or season. Summary statistics for Water Gauge data." At the bottom of this section is a grey button labeled "CSV".

Example Unit Conditions Report: Tables

Integrated Waterbird Management & Monitoring Data Entry ▾ Downloads Reports Projects ▾ 👤

[Generate Report](#) [Generate PDF Link](#)

View Report

Tables of statistics about the habitat at each unit, for each year or season.

Summary statistics for Water Gauge data.

[CSV](#)

Parameter	Buttonbrush Pond_Yr2012	Buttonbrush Pond_Yr2013	Crane Pond_Yr2012	Crane Pond_Yr2013
maxWaterGaugeReading	438.6	440.5	446.7	440.55
meanWaterGaugeReading	438.6	439.3594	437.4941	438.234375
medianWaterGaugeReading	438.6	439.225	436.7	437.7
minWaterGaugeReading	438.6	438.6	436.5	436.6
sdWaterGaugeReading	0	0.6704	2.438	1.50827923475727

Showing 1 to 5 of 5 entries Previous 1 Next

Summary statistics for Water Depth data.

[CSV](#)

Parameter	WaterhDepthOrder	Buttonbrush Pond_Yr2012	Buttonbrush Pond_Yr2013	Crane Pond_Yr2012	Crane Pond_Yr2013
maxWaterDepthPercent0To5CM	1	100	95	90	85
maxWaterDepthPercent15To25CM	3	0	0	20	50
maxWaterDepthPercent5To15CM	2	10	100	20	40
maxWaterDepthPercentDry	6	0	80	20	50
maxWaterDepthPercentOver25CM	4	0	0	20	50
maxWaterDepthPercentSaturatedMud	5	0	0	0	50
meanWaterDepthPercent0To5CM	1	98.6471	33.75	74.7059	37.8125

Summary Statistics: Always generated for each unit separately

- Separate table for each of 5 possible parameters: salinity, water level, water depth, land cover, vegetation height

Bird Use Days Report

Generating a Bird Use Days Report: Specify criteria

Integrated Waterbird Management & Monitoring

Data Entry Downloads Reports Projects

Site (Project): CLARENCECANNONNWR

Generate Reports

Report Type

Bird Survey Site Conditions **Bird Use Days** Vegetation Survey Report Output Description

Location

Select a project to include all locations within those projects in the report. Optionally, select locations from the projects selected to include only those locations in the report.

Projects

CLARENCECANNONNWR

MSLJ 3
MSLJ 4
MSLJ 5
MSLJ 6
MSLJ 7
MSLJ 8
MSLJ 9
RABBIT EARS JT

Select all Deselect all

Protocols

Filter results to show only those matching one or more protocols you select.

All Protocols Specific Protocols

IWMM_AerialSurvey
IWMM_FlushCount
IWMM_GroundAerialSurvey
IWMM_GroundSurvey

Species

Select one or more species. You may also filter by one or more guilds, and optionally one or more species within those guilds. Species are listed in taxonomical order.

All Species Guilds Species

BBWD - Black-bellied Whistling Duck
FLWD - Fulvous Whistling Duck
GWFG - Greater White-fronted Goose
LNGO - Lind. Goose
SNGO - Snow Goose
BLGO - Blue Goose
RSGO - Snow/Blue/Ross's Goose
ROGO - Ross's Goose

Dates

Filter results to show only those within the specified date range.

For Bird Use Days reports, a date range must be provided, and it must reflect the period for which the report is being requested. The time span between the start month/day and the end month/day defines the period used for the report. The period is applied to each year in the date range provided.

Date Range Start Date End Date

2010-09-10 2016-09-10

Apply user defined period

- From 2010-09-10 to 2010-09-10
- From 2011-09-10 to 2011-09-10
- From 2012-09-10 to 2012-09-10
- From 2013-09-10 to 2013-09-10
- From 2014-09-10 to 2014-09-10
- From 2015-09-10 to 2015-09-10
- From 2016-09-10 to 2016-09-10

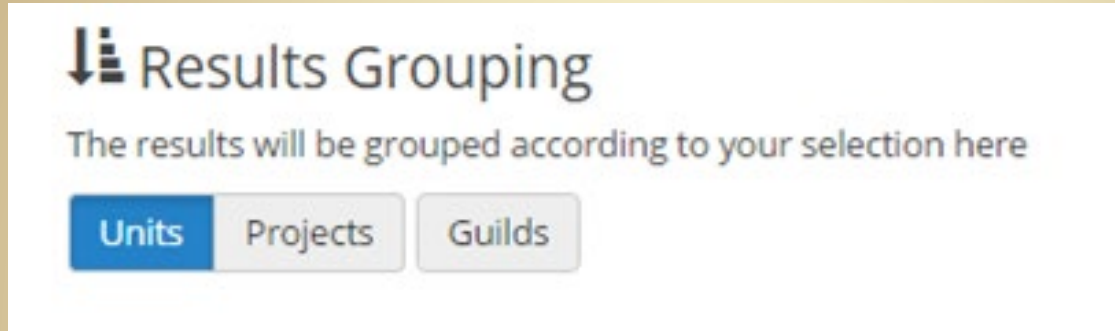
Results Grouping

The results will be grouped according to your selection here:

Units Projects

- Can filter by Location, Protocol and Species
- Requires **date range** for period for which report is requested
- The user-defined period is based on start month/day and end month/day and applied to each year in the date range specified

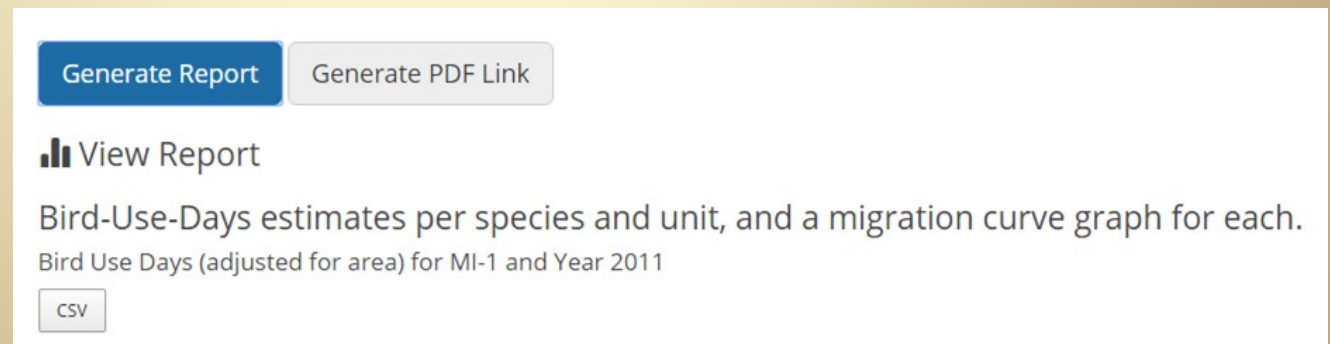
Bird Use Days Report: Specify Grouping Options



- Specify how results are grouped based on selection of units or projects, and also guilds.
 - Bird use days reports grouped by Project includes use-days summed across all units and then adjusted by the sum of all unit acres.
 - Bird use days reports grouped by Guilds will provide use-days summed across all species in selected guild at either level selected (unit or project).

Bird Use Days Report: Data and Format Availability

- Incorporates:
 - Legacy data
 - Data collected under current protocol
- Formats:
 - Interactive viewing
 - CSV file
 - PDF file



The screenshot shows a web interface with two buttons at the top: a blue "Generate Report" button and a grey "Generate PDF Link" button. Below these is a "View Report" link with a bar chart icon. The text below reads: "Bird-Use-Days estimates per species and unit, and a migration curve graph for each. Bird Use Days (adjusted for area) for MI-1 and Year 2011". At the bottom left of the interface is a "CSV" button.

Example Bird-Use-Days Report: Tables

Bird Use Days (adjusted for area) for MI-1 and Year 2011

CSV

Species	Location	StartDate	EndDate	BUD	Corrected_BUD	Variance	LowerLim	UpperLim	Ndays
Canada Goose	MI-1	2011-04-19	2011-11-22	2.1362	2.4832	41996538524542000	NA	401663919.7024	14
Glossy Ibis	MI-1	2011-04-19	2011-11-22	0.6398	0.6398	0	0	0	14
Great Blue Heron	MI-1	2011-04-19	2011-11-22	0.6289	1.1494	43424.6674	NA	409.5857	14
Great Egret	MI-1	2011-04-19	2011-11-22	0.3904	0.5639	0	0	0	14
Greater Yellowlegs	MI-1	2011-04-19	2011-11-22	0.5422	0.8892	0	0	0	14

Bird Use Days (unadjusted for area) for MI-1 and Year 2011

CSV

Species	Location	StartDate	EndDate	BUD	Corrected_BUD	Variance	LowerLim	UpperLim	Ndays
Canada Goose	MI-1	2011-04-19	2011-11-22	98.5	114.5	1805847276100000000	NA	2633883729.2153	14
Glossy Ibis	MI-1	2011-04-19	2011-11-22	29.5	29.5	0	0	0	14
Great Blue Heron	MI-1	2011-04-19	2011-11-22	29	53	43424.6639	NA	461.4363	14
Great Egret	MI-1	2011-04-19	2011-11-22	18	26	0	0	0	14
Greater Yellowlegs	MI-1	2011-04-19	2011-11-22	25	41	0	0	0	14

- **Bird-Use Days estimates per species & unit:**
 - adjusted for area (per hectare)
 - unadjusted for area (total use-days for unit)

Results Grouping

The results will be grouped according to your selection here

Units

Projects

Guilds

Example Bird-Use-Days Report: Tables

Bird Use Days (adjusted for area) for Mattamuskeet NWR and Year 2011

CSV

Guild ▲	Location	StartDate	EndDate	BUD	Corrected_BUD	Variance	LowerLim	UpperLim	Ndays
Waterfowl	Mattamuskeet NWR	2011-10-25	2012-05-28	1001.8487	1002.0024	58936818301.348	NA	476829.3673	42

Showing 1 to 1 of 1 entries

Previous Next

Bird Use Days (unadjusted for area) for Mattamuskeet NWR and Year 2011

CSV

Guild ▲	Location	StartDate	EndDate	BUD	Corrected_BUD	Variance	LowerLim	UpperLim	Ndays
Waterfowl	Mattamuskeet NWR	2011-10-25	2012-05-28	1023125.5	1023320.5	3271388067.7061	911216.2432	1135424.7568	42

Showing 1 to 1 of 1 entries

Previous Next

- **Bird-Use Days estimates grouped by Project and Guild**

↓ Results Grouping

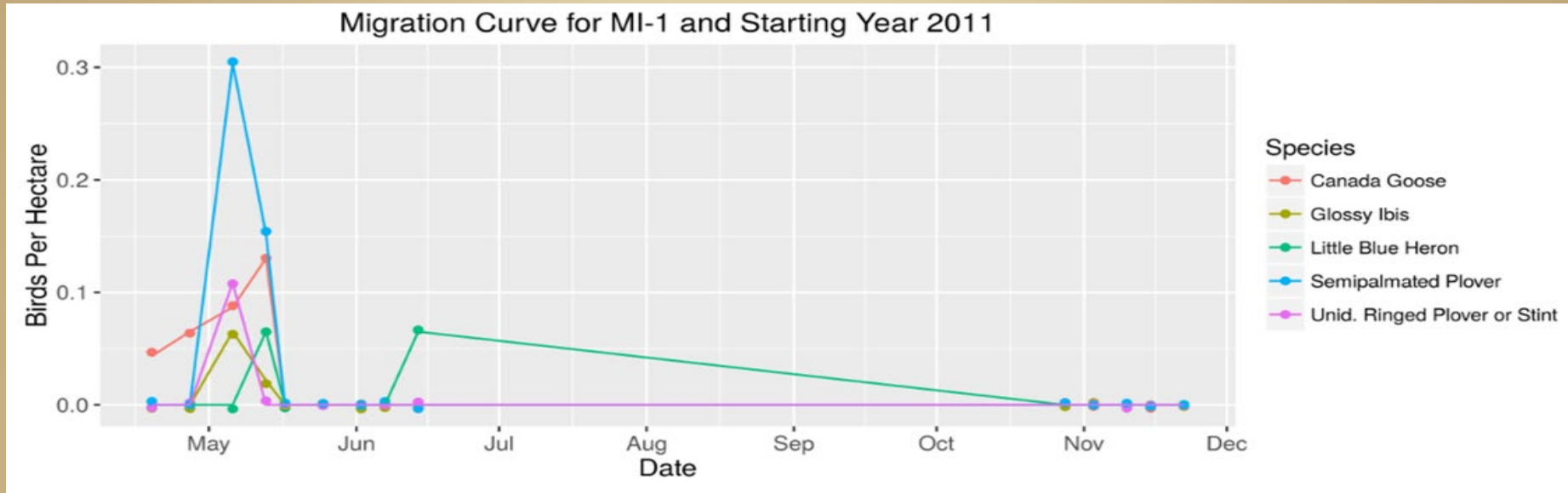
The results will be grouped according to your selection here

Units

Projects

Guilds

Example Bird-Use-Days Report: Migration Curve



- Can be generated for each taxon selected, for a maximum of 5.
- For a report for more than 5 species, the first 5 in taxonomic order with data to plot will be plotted.
 - To plot more than 5 species, select in groups of ≤ 5 , and generate plots one at a time.

Species

Select one or more species. You may also filter by one or more guilds, and optionally one or more species within those guilds. Species are listed in taxonomical order.

All Species | Guilds | Species

- ROGO - Ross's Goose
- BRAN - Brant
- CACG - Cackling Goose
- CANG - Canada Goose
- MUSW - Mute Swan
- TRUS - Trumpeter Swan
- TUSW - Tundra Swan
- UNCY - Unid. Swan

Dates

Filter results to show only those within the specified date range.

For Bird Use Days reports, a date range must be provided, and it must reflect the period for which the report is being requested. The time span between the start month/day and the end month/day defines the period used for the report. The period is applied to each year in the date range provided.

Date Range

Start Date: 2011-04-01

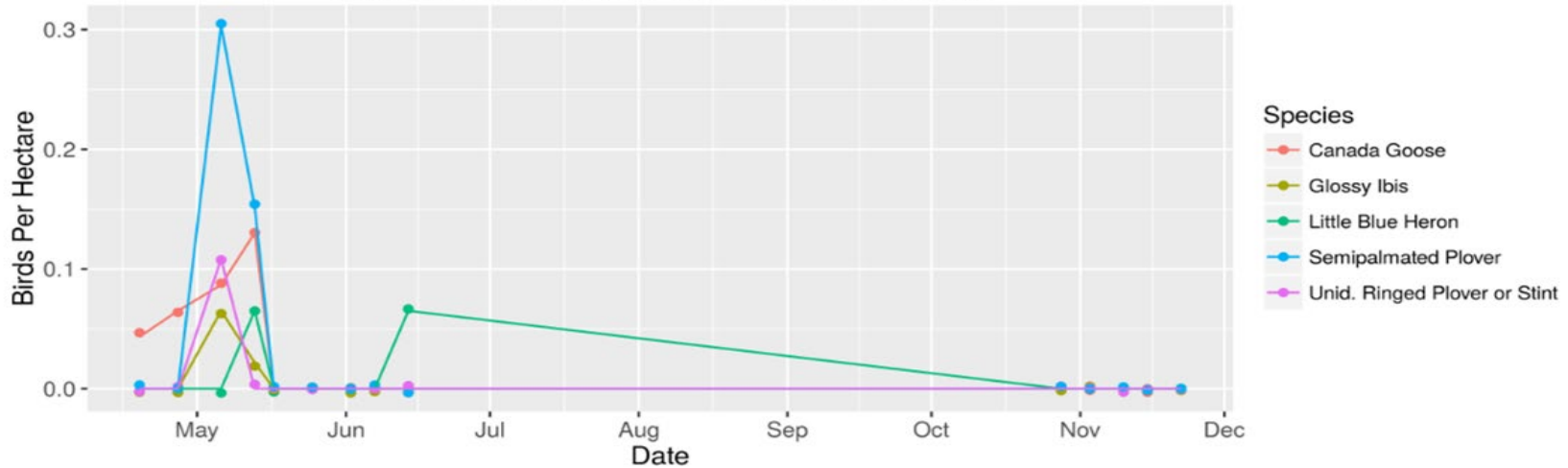
End Date: 2016-12-01

Apply user defined period

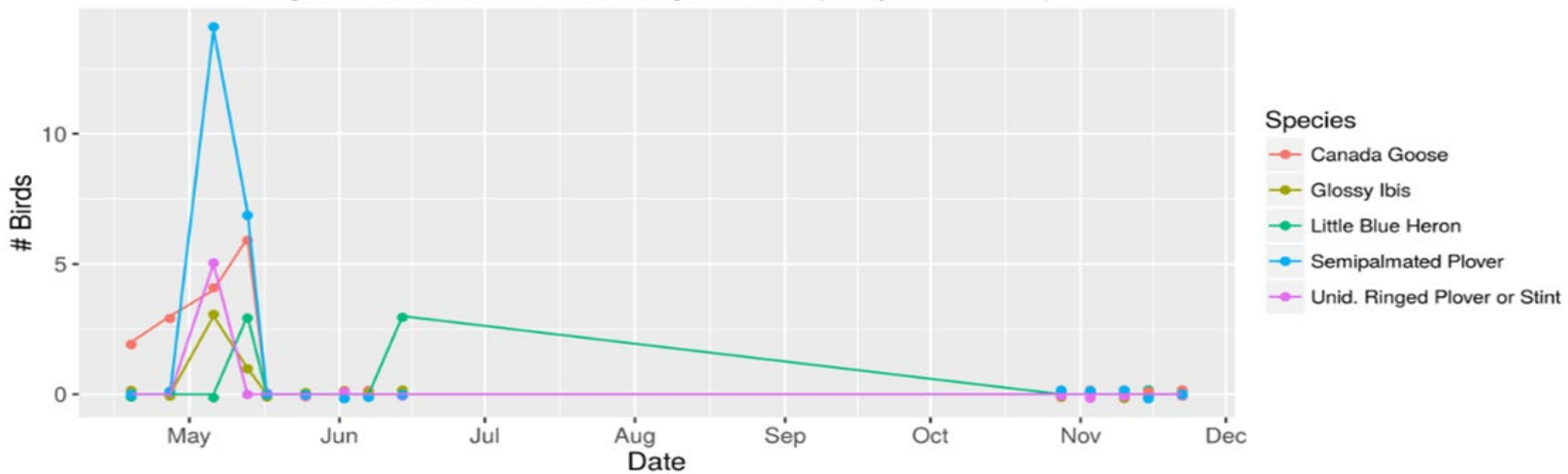
- From 2011-04-01 to 2011-12-01

Example Bird-Use-Days Report: Migration Curve

Migration Curve for MI-1 and Starting Year 2011

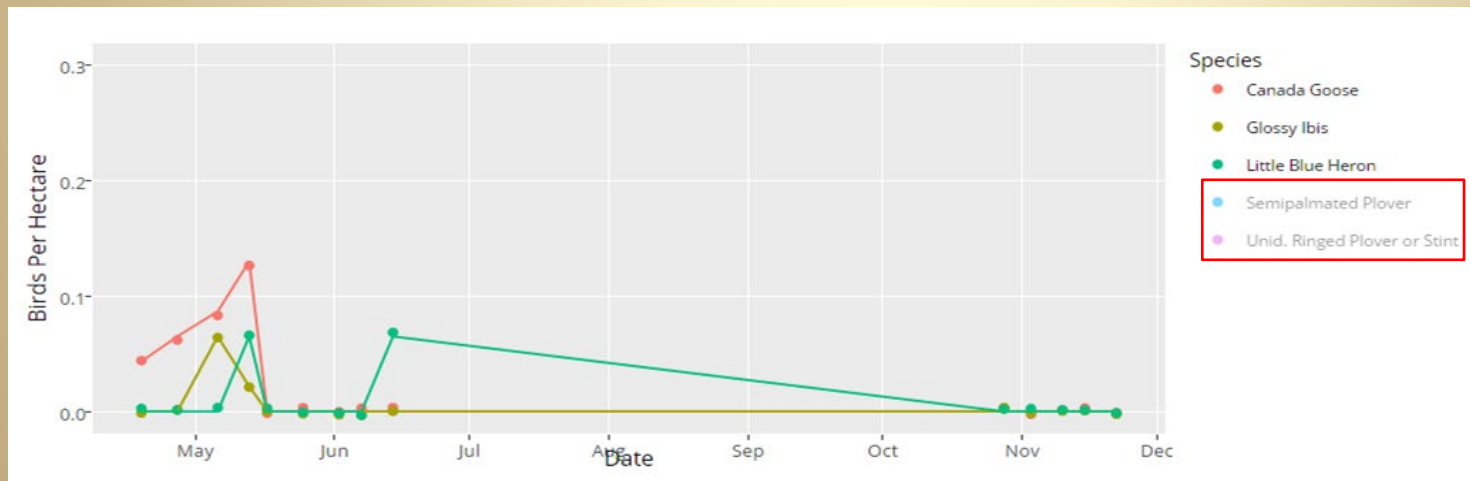
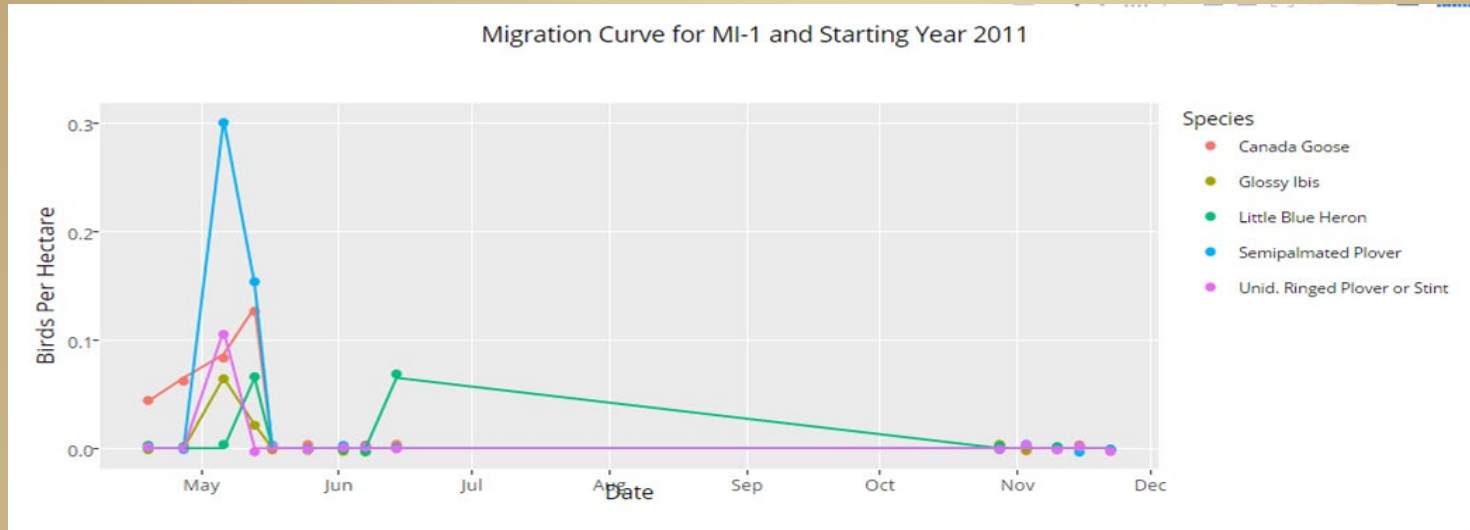


Migration Curve for MI-1 and Starting Year 2011 (unadjusted for area)



- Two migration curves generated:
 - Adjusted for area (birds per hectare)
 - Unadjusted for area (total birds per unit)

Example Bird-Use-Days Report: Migration Curve



- Click on species in legend to remove or add back into graph

Vegetation Survey Report

Generating a Vegetation Survey Report: Specify criteria

Integrated Waterbird Management & Monitoring Data Entry - Downloads Reports Projects -

Site (Project): CLARENCECANNONNWR

Generate Reports

Report Type

Bird Survey Unit Conditions Bird Use Days **Vegetation Survey** Report Output Description

Location

Locations can be specified by project or region. If using projects, select one or more projects to include all locations within those projects in the report. Optionally, select locations within those projects to include only those locations in the report. If using a region, select a single region to include all locations within that region in the report.

Projects

AGASSIZNWR	MSU 3
BACKBAYNWR	MSU 9
BKLEACHCONSERVATIONAREA	MSU 5
BLACKWATERNWR	MSU 7
BOMBAYHOOKNWR	MSU 6
CHINCOTEAGUENWR	MSU 1
CLARENCECANNONNWR	Big Pond
CRAB_ORCHARD_NWR	MSU 12

Select all Deselect all Select all Deselect all

Dates

Filter results to show only those within the specified date range:

All Dates Start Date End Date

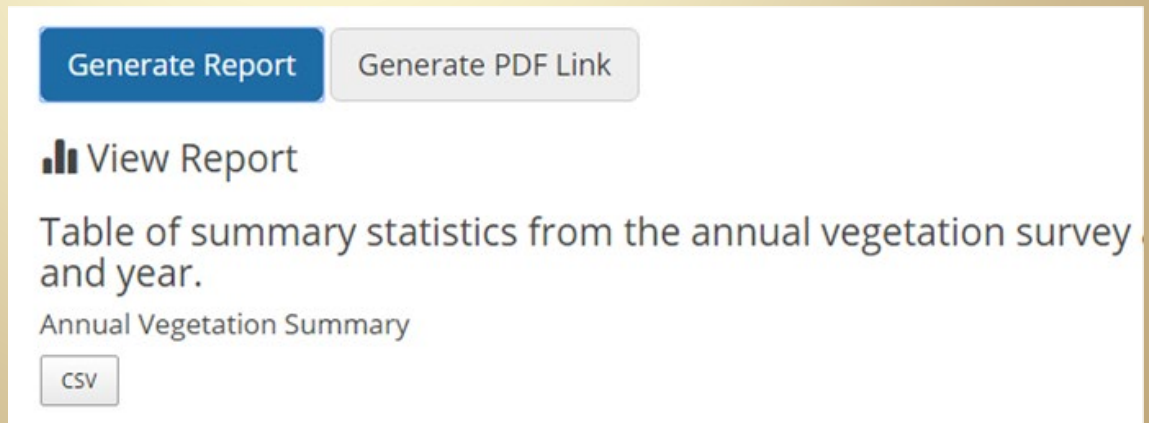
Date Range

Generate Report

- Can filter by Location and Date

Unit Conditions Report: Data and Format Availability

- Incorporates:
 - Data collected under current protocol only
 - Legacy data not available
- Formats:
 - Interactive viewing
 - Downloads
 - CSV file
 - PDF file



The screenshot shows a user interface for generating a report. At the top, there are two buttons: a blue "Generate Report" button and a grey "Generate PDF Link" button. Below these buttons is a section titled "View Report" with a small bar chart icon. Underneath, there is a description: "Table of summary statistics from the annual vegetation survey and year." followed by the text "Annual Vegetation Summary". At the bottom of this section, there is a grey button labeled "CSV".

Example Vegetation Survey Report: Tables

View Report

Table of summary statistics from the annual vegetation survey and seed production index, for each unit and year.

Annual Vegetation Summary

CSV

Project	Unit	DateVisited	TotalPlantSpecies	DiversityInd	AnnPerCoverPct
Mattamuskeet NWR	MI-1	2015-10-13	2	1.71	A:0/P:70
Mattamuskeet NWR	MI-1	2016-09-13	3	2.24	A:10/P:60
Mattamuskeet NWR	MI-10N	2015-10-19	6	4.9	A:20/P:90
Mattamuskeet NWR	MI-10N	2016-09-12	5	3.89	A:0/P:75
Mattamuskeet NWR	MI-10S	2015-09-22	2	1.84	A:70/P:30
Mattamuskeet NWR	MI-10S	2016-09-12	5	3.16	A:10/P:40
Mattamuskeet NWR	MI-11	2015-11-03	2	1.53	A:0/P:100
Mattamuskeet NWR	MI-2E	2015-10-13	1	1.26	A:0/P:10
Mattamuskeet NWR	MI-2W	2015-10-13	2	1.58	A:0/P:20
Mattamuskeet NWR	MI-2W	2016-09-13	2	1.81	A:0/P:40

- **Annual Vegetation Summary:** reports total plant taxa identified, diversity index, and percent cover of all taxa identified as annual and perennial plants.
 - The total, annual, and perennial plant cover can exceed 100%, as the cover of individual plants can overlap extensively.

Example Vegetation Survey Report: Tables

Annual Vegetation Report

CSV

Project	Unit	Year	ScientificName	AreaSurveyed_m2	PlantPct	EmergentCover	RelativePctCover	Dominant
Mattamuskeet NWR	MI-1	2015	Carex spp.	461104.4513	10	35	9.1	No
Mattamuskeet NWR	MI-1	2015	Eichhornia crassipes	461104.4513	60	35	54.5	Yes
Mattamuskeet NWR	MI-1	2015	Juncus spp.	461104.4513	30	35	27.3	Yes
Mattamuskeet NWR	MI-1	2015	Phragmites australis	461104.4513	10	35	9.1	No
Mattamuskeet NWR	MI-1	2016	Bacopa spp.	461104.4513	10	70	9.1	No
Mattamuskeet NWR	MI-1	2016	Eleocharis quadrangulata	461104.4513	10	70	9.1	No
Mattamuskeet NWR	MI-1	2016	Equisetum	461104.4513	30	70	27.3	Yes
Mattamuskeet NWR	MI-1	2016	Nymphaea odorata	461104.4513	50	70	45.5	Yes
Mattamuskeet NWR	MI-1	2016	Utricularia purpurea	461104.4513	10	70	9.1	No

Showing 1 to 9 of 9 entries

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- **Annual Vegetation Report:** For each unit and year, includes for each plant species observed: survey unit area, proportion of vegetated portion of the unit covered by the species (Plant Pct), percent of unit that is emergent vegetation, relative percent cover, and dominance status.

Example Vegetation Survey Report: Tables

Seed Production Index Report

CSV

Project	Unit	Year	TotalSeedProductionIndex
Mattamuskeet NWR	MI-1	2015	0
Mattamuskeet NWR	MI-1	2016	4

Showing 1 to 2 of 2 entries

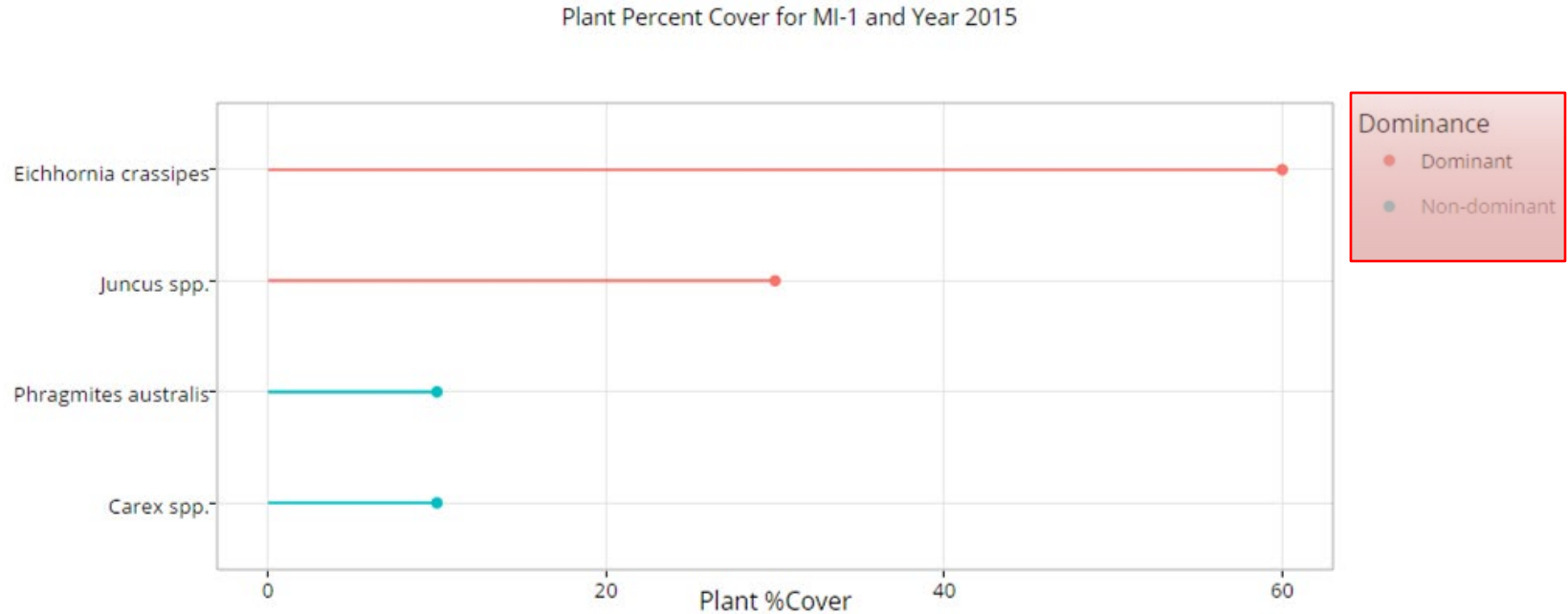
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- **Seed Production Index Report:** Includes a seed production index (SPI) for each year and tracks temporal changes in seed production within units.
- Calculated for:
 - plant species consumed by waterfowl where the plant percent vegetative cover is > 5%
 - only those plant foods for which seed head size and density were estimated using measurements provided in the **IWMM Photographic Seed Head Assessment Guide**.
- An SPI = 0 indicates that none of the SPI plant species were present or that they were not measured.

Example Vegetation Survey Report: Dominance Graphic



[Show graph as static image](#)

- **Plant Dominance Status:** Estimated by applying the 50/20 rule
 - (those species that represent the first 50% of the total plant area, plus those species that cover an area $> 20\%$).
- Click on species in legend to remove or add back into graph
- Click on “show image as static graph” for PNG image to include in report.

For Additional Help:



<https://iwmmprogram.org/contacts/>