# Crow Island State Game Area Annual Report





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# General Introduction

Crow Island State Game Area lies within the Saginaw Bay lake plain, formerly characterized by swamp forest, wet-mesic prairie and emergent marshes. The game areas is a complex of emergent wetlands, managed wetland impoundments, grasslands, and agricultural uplands that provide habitat for a wide variety of migratory birds (both game and non-game) as well as associated invertebrate, herptiles and mammalian wildlife.

Crow Island SGA spans portions of Saginaw and Bay Counties along the lower Saginaw River in east-central Lower Michigan. There are presently 3,489 acres included in state ownership.

# Area Goals and Management Emphases

Crow Island SGA is managed to meet goals and objectives, within the Wildlife Division's Guiding Principles and Strategies (GPS) which are, primarily, to promote safe nesting, brood rearing and migration stop-over habitat for local and migratory waterfowl and shorebirds and to provide for myriad hunting and non-consumptive wildlife related recreational pursuits. Through habitat management efforts intended for these species, native mammals, herptiles and a variety of game and non-game birds also benefit. In addition to providing for the habitat needs of various wildlife species, Crow Island is primarily managed to provide hunting, trapping and wildlife viewing opportunities to the public.

# Wildlife Production and Use Estimates

Approximately 30–60 breeding pairs of ducks produced 100–300 ducklings on the area. Approximately 40–50 pairs of Canada geese produced 280–385 goslings. Breeding pairs were most easily observed in the Baldpate, Panko and Davis units while those using the East unit were often difficult to observe. Numbers of breeding ducks and Canada geese appeared to be similar to numbers observed in previous years. Waterfowl observed with young included Trumpeter swan, Canada goose, Mallard, Wood Duck, American Coot, and Pie-billed Grebe. These observations likely do not represent all waterfowl species breeding at Crow Island. Probable breeders included Blue-Winged Teal, Green-Winged Teal, American Wigeon, and Common Gallinule. Other ducks observed on the area at various times included Lesser Scaup, Bufflehead, Common Goldeneye, Hooded Merganser, Common Merganser, Ring-Necked Duck, Northern Pintail, Black Duck and Gadwall. Three pairs of Trumpeter swans were on the area and all pairs had young. A number of White Pelicans used the area throughout the summer.

Pheasants were observed on the area on several occasions throughout the year. Overall, the number of pheasants on the area appears to be similar to 2019. Crow Island continues to be an important wintering area for the local pheasant population because of the availability of high-quality winter cover in the form of large cattail stands and the close proximity to food resources in nearby agricultural fields. Crow Island has historically wintered up to 40 pheasants, although less than 40 were observed wintering on the area this year.

Wild turkeys were observed on several occasions. Several gobblers were seen in groups though out the year.

White-tailed deer were frequently encountered on the area throughout the spring and summer months. The size of the local herd is difficult to estimate because of their tendency to frequent dense cattail stands. The spring deer herd numbered 20–40 animals. Similar to previous years, deer were particularly numerous this spring in the Davis and Panko units. These animals tend to disperse late in spring once croplands to the east begin providing both food and cover.

Furbearer numbers decreased in most of the Units. Muskrat populations have traditionally fluctuated in all of the units as water levels and cattail coverage change. Coyotes and foxes were observed on several occasions across the area. Woodchuck, raccoon, mink, opossum and cotton-tailed rabbits were common on the area.

Other wildlife use and observations on the area included nesting Bald Eagles in the Plowdry, Greenhead and the East Unit; a nesting pair of Great Horned owls in the Plowdry Unit. Breeding numbers of yellow-headed blackbirds were lower this year compared to 2019. Early successional habitats across the area continue to provide significant foraging and nesting habitats for many species of migratory passerines. American Bitterns were heard calling this past spring and were seen flying over the area on several occasions. Black-crowned Night Herons were often seen on the area, as were Great Blue Heron, large numbers of Great Egret, Green Heron, Northern Harrier, American Kestrel, Black Terns (probable breeders) and a wide variety of shorebirds, particularly on the extensive mudflats in the Plowdry and Davis Units. Infrequently encountered species included Rough-legged Hawk and Northern Shrike.

# Significant Habitat Management

Planting at Crow Island was completed on a timeframe similar to previous years. A large area of the Davis Unit corn was flooded out and was not planted. Overall, crops planted on state lands made it through the summer in fair condition. Crops were harvested after the opening of the firearm deer season. Crops were planted on 111.4 acres in the Stork unit by two sharecroppers.

Water levels were extremely high across the area throughout the winter and spring. Wind events in the spring brought flooding water over several units. High water levels in the Saginaw Bay and Saginaw River have made issues as on several wind events the water topped the dikes. Crow Island SGA received extensive flooding in May 2020 after the failures of the Sanford and Edenville dams which delayed some fieldwork. The entire game area had high water by the beginning of the duck season; water levels were high but the vegetation also was very abundant.

Beetles (Galerucella spp.) continue to have a significant impact on purple loosestrife in the East Unit. Some purple loosestrife could be found in flower within the original release site in the south end of the unit. The beetles have expanded their range and can now be found across the entire game area.

# Land Acquisition

No land was acquired in 2020.

### Area Maintenance

- The East Unit dike was repaired after a breach.
- The Saginaw County Drain Commission completed extensive brush removal and a ditch cleanout along the southeast portion of the East Unit.
- Gravel and rock were added to the interurban and parking lot.
- Dikes were mowed and holes were patched as needed.
- Parking lots were mowed, signs replaced, and gravel added where needed.
- Posting of the area was continued.

### Equipment

No equipment was purchased.

### Special Projects

None

# Recreational and Educational Activities

Table 1. Estimates of user trips and hunter harvest for 2020

ACTIVITY	USER TRIPS	HARVEST	HARVEST PER USER TRIP
SEPT. GOOSE HUNTING	100	70	0.7
REGULAR GOOSE HUNTING	150	140	0.9
SEPT. YOUTH HUNTING	21	70	3.3
<b>REGULAR DUCK HUNTING</b>	1,500	1,000	0.6
TEAL HUNTING	55	175	3.18
ARCHERY DEER HUNTING	60	9	0.15
FIREARM DEER HUNTING	110	11	0.1
MUZZLELOADER DEER HUNTING	20	2	0.2
ARCHERY DEER HUNTING	60	9	0.15
SMALL GAME HUTNING	350	NA	NA
WILDLIFE VIEWING	5,000	NA	NA
FISHING	30	NA	NA
TOURS	0	NA	NA
HIKING/BIKING	3,500	NA	NA

The data listed above are rough estimates of use at Crow Island. Refer to the "Hunting Season Results" section for the derivation of this information. No facilities or staff are available on site to provide concrete numbers regarding user trips and harvest. Trappers are required to turn in their catch results, see below table for results.

Table 2. Furbearer harvest, Crow Island State Game Area, 2009-2019.

YEAR	NUMBER OF TRAPPERS	MUSKRATS	BEAVER	MINK	RACCOONS	OTTERS	FOX RED/GREY	OPOSSUM
2019	14	1203	5	5	12	1	1	12
2018	13	1207	8	9	6	0	1	5
2017	18	1583	44	6	2	1	0	2
2016	16	3012	12	4	21	0	1	22
2015	21	3128	17	11	17	3	1	1
2014	21	1406	5	7	29	4	6	8
2013	29	878	14	5	14	0	1	6
2012	32	2119	10	13	34	0	1	19
2011	29	1999	9	14	44	0	1	1
2010	22	2124	29	23	9	0	5	4
2009	20	3225	18	16	9	0	3	3

### Waterfowl Banding

None due to Covid-19 impacts.

# Waterfowl Hunting Season

### Introduction

Crow Island provides marsh/wetland hunting opportunities in the Baldpate, Plowdry and Davis units on the west side of the Saginaw River, and in the East and Panko Units on the east side of the river. Waterfowl hunting opportunities also exist in harvested croplands in the Stork Unit. This year we included the DMDF (dredge material disposal facility) that is located next to the Baldpate Unit as part of our refuge counts.

### Weather and Habitat Conditions

Temperatures on opening day of the general waterfowl season were in the mid 40's in the morning with a 10–15 mph wind. Temperatures then climbed into the mid 50's by noon. After the opening weekend, daytime high temperatures were in the 60's to 50's with lows in the upper 20's to 40's from October to early November. Temperatures remained above average for the first month of the waterfowl season. The first hard freeze occurred around the 7th of November. The area then opened back up and remained ice free until mid-December then ended the season with ice.

### Migration and Waterfowl Numbers

Teal numbers began to build in late August and were steady until the middle of September. Early teal season proved above average compared to recent years. Wood duck numbers were good though mid-October. Mallard numbers were steady throughout the entire season with a little peak in early November. There were good numbers of Wigeon in September and gadwall in early November. Overall, duck numbers peaked at approximately 2,035 the first week of November, this is down from last year. Goose numbers peaked at approximately 700 around November 11th. Table 4 summarizes estimated waterfowl numbers at Crow Island from September 1 to December 1, 2020. The number of both ducks and geese shown in Table 4 represents only a portion of those present at the time of the observation. Both ducks and geese tended to congregate in the refuge in potholes concealed by dense vegetation, thus the number of birds present was likely greater than estimates. We also include the number of waterfowl that were present in the DMDF as part of the refuge numbers.

DATE	DUCK NUMBERS	GEESE NUMBERS	TOTAL WATERFOWL
19-SEP	620	275	895
26-SEP	825	425	1250
03-OCT	2005	600	2605
10-OCT	1895	500	2395
17-OCT	1900	800	2700
24-OCT	1660	850	2510
31-OCT	1505	925	2430
07-NOV	1710	850	2560
14-NOV	1575	875	2450
21-NOV	1095	550	1645

Table 4. Estimated waterfowl numbers at Crow Island, Sept. - Nov. 2020

### Season Dates and Area Regulations/Bag Limits

Duck: Oct. 10 – Dec. 6 & Dec. 26-27 Goose: Sept. 1-30, Oct. 10- Dec. 6, Dec. 26-27, and Jan. 23 - Feb. 8, 2021

Crow Island is open to waterfowl hunting without a permit. No permits are required for early goose season or the youth and veteran's waterfowl hunting weekend. Hunters are not required to report the number of waterfowl or species taken. Hunters can pursue waterfowl anywhere on the area outside of the Greenhead Unit refuge.

### Hunting Season Results

Because there are no facilities or personnel on site to record the numbers and species of waterfowl taken, any estimate of harvest is highly speculative and is based on observations only. The number of hunters using the area appeared to be higher than 2019. The following estimates reflect the increase in hunting success. Past opening day bag checks showed that average kill per hunter contacted was 1.8 ducks. Based on that average, the estimated 270 hunters on the area opening day killed 486 ducks. Hunting success declines after opening day. Based on a post-opening day average of 0.8 ducks/hunter, an estimated 850 parties averaging 2.5 hunters/party killed 1,700 ducks. An estimated 12 parties for the youth hunt averaging two hunters per party killed an estimated 65 ducks. These numbers, added with the opening day harvest, yield an estimated kill of 2,251 ducks for the entire season. An estimated 100 goose hunters took 95 geese (0.95 geese/hunter) during the early and regular goose seasons.

### Cropping and Water Level Management

Crops were in good condition at the start of waterfowl season. No crops were flooded on the area. Most crops were harvested by the third week of November.

Water levels were high going into summer 2020. Water level management was hard this year due to the increase of water in the Saginaw River and flooding in May. As water levels remained high during the summer, pumps were operated when needed, and we went into the season with high water.

### **Special Projects**

Dike work on the Davis Unit spillway was to started but had problems with repeat flooding, and was further hindered due to COVID-19 work restrictions.

#### Recommendations

- 1. Construct an on-site storage building that equipment and items can be stored in.
- 2. Continue to improve dike system across the area. Much remains to be done.
- 3. Connect the Baldpate Unit to the Saginaw River for better water source and water control.
- 4. Continue the treatment of Phragmites.
- 5. Create openings in the Greenhead Unit
- 6. Have FRD do a burn in the marsh units.
- 7. Investigate ability to utilize DOW settlement money to purchase land.

### Prominent Clientele/Influence Groups

ITC Transmission The Michigan Duck Hunters Association Ducks Unlimited