

Gourdneck State Game Area Master Plan  
Michigan Department of Natural Resources



**WILDLIFE DIVISION**  
**NATE DEVRIES**  
**MAY 2017**

## Contents

Gourdneck State Game Area Master Plan Michigan Department of Natural Resources.	1
Intended Purpose and General Management Direction .....	3
Background .....	3
Wildlife Species .....	4
Existing Conditions .....	5
Recreational Use .....	6
Impacts on the Local Economy .....	6
Management Direction .....	7
Goals, Objectives, and Management Actions .....	7
Acquisition and Disposal of Land .....	10
<b>Plan Review</b> .....	10
<b>Approvals</b> .....	10

## **Intended Purpose and General Management Direction**

State Game Area (SGA) Master Plans provide direction for habitat management based on the Featured Species selected for the particular SGA and direct recreational use of the area. Master Plans also help determine operational details to achieve goals and objectives outlined in other Division planning efforts including the Wildlife GPS and Southwest Region Habitat Priorities document. The following information describes some of the considerations used to develop goals and objectives for Gourdneck State Game Area for 2017 through 2027.

Gourdneck SGA (2,293 acres) is located in the southwest corner of Kalamazoo County in Portage Township T3S R11W, Sections 19,20,29,30,31,32,33 and Schoolcraft Township T4S R11W, Sections 3,4,9,10 (Figure 1). Communities within 5 miles of Gourdneck SGA include: Portage, Kalamazoo, Schoolcraft, and Vicksburg. Communities within 20 miles include: Battle Creek, Mendon, Three Rivers, Marcellus, Lawton, Paw Paw and Mattawan.

Gourdneck State Game Area was established in 1941 in the form of a parcel of land along Gourdneck and Hogset Lakes. On September 4, 1941, H.D. Ruhl wrote that this lake frontage made “the tract unusually desirable for waterfowl and muskrats.” In addition to wetlands, much of the area purchased was idled agricultural fields as well as forested areas. By 1945, using Pittman-Robertson (PR) Funds, the current U-Ave parcel was complete and parcels along Centre Avenue had been purchased. In the early 1950’s, the Centre Ave parcel was completed and parts of the US-131 parcel were completed using State Game and Fish and PR Funds. Through the next three decades, the remainder of the Gourdneck SGA was completed using Game and Fish, State Game and Fish, PR, and Michigan Natural Resources Trust Funds. The SGA was purchased as public hunting property and has been primarily managed to provide quality habitat for white-tailed deer, wild turkey, eastern cottontail, fox squirrels, and wood ducks.

## **Background**

At a local level, this plan helps fulfill goals and objectives of other higher level Department and Wildlife Division plans and initiatives. The Department goals (protection of natural resources, sustainable recreation, strong natural resource-based economies, and strong relationships and partnerships), the Wildlife Division’s Guiding Principles and Strategies (Goal 2-Manage habitat for sustainable wildlife populations and Goal 4-Increase public participation in hunting and trapping), More Bang For Your Buck

concepts (outstanding grouse, woodcock and turkey hunting, the challenge of small game hunting, and great diversity of high quality waterfowl hunting), the Division's Southwest Regional Operational Plan, Southwest Region Habitat Guidance documents, and the Southwest Region Land Management Plan are all reflected in this master plan.

## Wildlife Species

Gourdneck SGA currently provides quality habitat for white-tailed deer, wild turkey, and cottontail rabbit. Considering that quality hunting opportunities are the goal of Gourdneck SGA, this plan will focus on these three species. However, these management activities will benefit other species including American woodcock, fox squirrels, and bobolink. As a part of our public trust responsibilities, this plan will also consider Threatened and Endangered (T&E) and Special Concern (SC) in our management activity planning so that negative impacts to these species are eliminated. Three such species are Henslow's sparrow, eastern box turtle and eastern massassauga rattlesnake, in which all three are known to occur on Gourdneck SGA. Many migratory birds are present and nest at Gourdneck SGA, as well as a host of reptile and amphibian species.

**Table 1:** Featured Species of Gourdneck State Game Area

Common Name	Featured Species	T&E, SC Species	Comments
Cottontail Rabbit	Yes	No	Brush piles, young forest
Eastern Box Turtle	No	Yes	Consider presence in burn plans, mowing
Eastern Massassauga Rattlesnake	Yes	Yes	Follow Candidate Conservation Agreement with Assurances (CCAA)
White-tailed Deer	Yes	No	Food plots, forest management
Wild Turkey	Yes	No	Openings, food plots, forest management
American Woodcock	Yes	No	Young forests, openings
Bobolink	No	No	Grasslands

## Existing Conditions

Gourdneck State Game Area consists of four separate units. Although physically disjunct, they share many of the same cover types, including oak, mixed upland deciduous, herbaceous openland and various wetland types. The two northern units are hillier than the rest and contain parts of Hampton Creek and Hampton Lake. These units also contain several stands of planted pine trees. The US-131 unit consists of oak forest and grassland as well as lowland deciduous forest and associated wetlands. This unit also contains parts of Mud, Sugarloaf and Little Sugarloaf Lakes. The southern U-Ave unit consists of forested stands surrounding crop fields and open herbaceous areas. This unit contains northern hardwoods, oak, mixed upland deciduous, lowland forests, as well as planted pines. Several lowland shrub swamps exist within this unit as well as parts of Gourdneck Creek, Gourdneck Lake and Hogset Lake.

**Table 2.** Current cover types on the Gourdneck SGA from MIFI surveys taken in 2016

CoverType	Total Acres	% of SGA
Lowland Deciduous	504	22
Oak	442	19
Lowland Shrub	233	10
Water	184	8
Mixed Upland Deciduous	160	7
Red Pine	160	7
Marsh	149	6
Northern Hardwood	149	6
Herbaceous Openland	135	6
Lowland Mixed Forest	69	3
Cropland	56	2
Upland Shrub	19	1
Planted Mixed Pines	15	1
Aspen	13	1

**Table 3.** Current Natural Communities and Desired future condition at Gourdneck SGA

Community	Global and State Ranks	Element Occurrences Statewide	Element Occurrences in SWR	Element Occurrences on Gourdneck
Hardwood-Conifer Swamp	G4/S3	42	14	1*
Prairie Fen	G3/S3	155	71	2

\*Observed in 2016 survey, but not in MNFI EO database 12-2016

## **Recreational Use**

The Gourdneck SGA provides a host of recreational opportunities for local residents and visitors alike, including hunting, trapping, bird watching, wildlife viewing and hiking. State game areas in southern Michigan are under continual pressure for other uses, however under Federal and State regulations, recreational and commercial uses on the area that are not incidental to our management for the purposes described above are generally not allowed. Some of these uses can be allowed, under the following circumstances:

1. The uses do not interfere or conflict with the wildlife conservation purposes of the area described above.
2. The Department has no obligations to determine if requested uses would conflict or interfere; the burden of determining must remain with those requesting the uses.
3. The requested uses cannot be exclusive of other allowable uses and must not result in the Department losing management control of any portion of the area.
4. A lack of a specific prohibition in rules and regulations for the area does not constitute approval of the activity.
5. The Department always reserves the ability to disallow activities previously allowed as wildlife conservation needs dictate.

Additionally, the Department will continue to monitor any existing commercial and recreational uses for interference with the intended purposes of the area as described in this plan.

## **Impacts on the Local Economy**

Contributions to the local economy resulting from activities at Gourdneck SGA include sharecropping on 50 acres through agreement with a local farmer and purchases at local gas stations, restaurants, sporting goods and grocery stores by hunters using the area. Planned timber sales will also contribute jobs and materials to the local economy.

## Management Direction

Table 3 below indicates desired future condition. Increases in one cover type will mean decreases in another. For instance, an increase in oak type results in a decrease in mixed upland deciduous and pine types.

**Table 3.** Desired Future Conditions

Cover Type	Desired Future Condition
Lowland Deciduous	Maintain
Oak	Increase
Lowland Shrub	Maintain
Water	Maintain
Mixed Upland Deciduous	Decrease
Red Pine	Decrease
Marsh	Maintain
Northern Hardwood	Maintain
Herbaceous Openland	Maintain
Lowland Mixed Forest	Maintain
Cropland	Maintain
Upland Shrub	Decrease
Planted Mixed Pines	Decrease
Aspen	Increase

## Goals, Objectives, and Management Actions

What follows is the strategic direction for the Gourneck SGA, to be implemented during this planning cycle. This plan describes the **goals** or desired future condition for the area, the **objectives** under each goal, and the **actions** associated with each objective. Goals come mostly from the featured species and habitat issues relevant to Gourneck SGA.

**Goal 1** is to provide cover and food to attract and hold white-tailed deer.

**Rationale:** White-tailed deer, designated a featured species by the Wildlife Division, are a game species highly sought after by hunters. Public land provides hunting opportunities to many people without access to private land so habitat for this species provides increased opportunity. Habitat management that benefits white-tailed deer will also benefits many species like wild turkey, cottontail rabbit, and American woodcock.

**Objective A** is to create early successional forest cover and diversify forage.

**Action 1.** Harvest 80 acres of planted pines across all 4 units.

**Action 2.** Harvest 20 acres of aspen and mixed hardwoods in the US 131 and U Ave. unit.

**Action 3.** Evaluate oak stand conditions for potential regeneration harvest. If conditions are conducive, follow up with harvest.

**Objective B** is to maintain 50 acres of agricultural food plots to provide fall, winter and early spring food and escape cover

**Action 1.** In cooperation with sharecropper, plant 40 acres of annual crops including corn, soybeans, and winter cover crops (rye, wheat, brassica)

**Action 2.** Establish and maintain 10 acres of perennial food plots such as clover

**Goal 2** is to maintain quality feeding and roosting areas and provide nesting and brooding habitat for wild turkeys.

**Rationale:** Wild turkey, designated a featured species by the Wildlife Division, are a game species highly sought after by hunters. Public land provides hunting opportunities to many people without access to private land so habitat for this species provides increased opportunity. Habitat management that benefits wild turkey will also benefit many species like eastern box turtles, white-tailed deer, cottontail rabbit, and American woodcock.

**Objective A** is to preserve roosting trees.

Action 1. Preserve clumps of large oak trees, known roost trees, and large trees along south facing slopes when doing forest management work.

**Objective B** is to maintain existing herbaceous cover with areas of high plant diversity throughout all 4 units.

Action 1. Use prescribed fire and/or rotational mowing to reduce woody vegetation within herbaceous openings

Action 2. Interseed 20 acres within the US 131 unit with a diverse forb mix.

**Objective C** is to create coarse woody debris for nesting cover.

Action 1. Leave slash loosely piled within tree harvest sites.

**Objective D** is to maintain 50 acres of food plots as outlined in Goal 1, Objective B.

**Goal 3** is to provide a large block of grassland for bobolink nesting cover

**Rationale:** The bobolink is also designated as a featured species by the Wildlife Division. The presence of bobolinks and other grassland birds on Gourdneck SGA draws birdwatchers from around southwest Michigan to enjoy public land. Habitat management that benefits bobolinks will also benefit a wide variety of grassland species and featured species including eastern box turtles, American woodcock, and wild turkeys.

**Objective A** is to maintain 100 acres of grassland and forbs within the US 131 unit.

**Action 1.** Maintain 100 acres of grassland using prescribed fire/rotational mowing as well as herbicide treatment to reduce woody and invasive plant encroachment.

**Action 2.** Cut and herbicide black locust trees encroaching on grassland.

**Goal 4** is to create early successional cover for roosting, nesting, and brooding cover for American woodcock.

**Rationale:** American woodcock, designated a featured species by the Wildlife Division, are a game species highly sought after by hunters. Public land provides hunting opportunities to many people without access to private land so habitat for this species provides increased opportunity. Habitat management that benefits American woodcock will also benefit many species like massassauga rattlesnake, wild turkey, cottontail rabbit, and white-tailed deer.

**Objective A** is to maintain native herbaceous/shrub cover surrounding the Vanderbilt fen within the US 131 unit.

**Action 1.** Treat invasive shrubs within the fen and fen margins with herbicide.

**Objective B** is to create early successional forest cover.

**Action 1.** Harvest pine and aspen trees as outlined in Goal 1, Objective A, Actions 1 and 2

**Objective C** is to maintain grassland with areas of high for diversity within the US 131 unit.

**Action 1.** Maintain and enhance 100 acres of grassland as outlined in Goal 2, Objective B, Actions 1 and 2

**Goal 5** is to create and maintain cover and food for cottontail rabbit while facilitating better hunting conditions.

**Rationale:** Cottontail rabbit, designated a featured species by the Wildlife Division, are a game species highly sought after by hunters. Public land provides hunting opportunities to many people without access to private land so habitat for this species provides increased opportunity. Habitat management that benefits cottontail rabbit will also benefit many species of song birds as well as white tailed deer and American woodcock. The objectives outlined below improve the quality of the rabbit hunting on GSGA.

**Objective A** is to improve woody and herbaceous browse and early successional cover

**Action 1.** Harvest trees as described in Goal 1, Objective A, Actions 1 and 2 to allow a flush of vegetation at ground level.

**Action 2.** Maintain clover planting installed in 2017 through annual mowing

**Objective B** is to improve hiding cover accessible to hunters

**Action 1.** When harvesting trees, leave loose piles of slash within the site to provide hiding cover.

**Action 2.** Use volunteer groups (such as MUCC On-The-Ground) such as create up to 15 brush piles to complete existing brush pile efforts (25 built in 2017)

**Action 3.** Use volunteer groups to continue planting trees on up to 3 more acres.

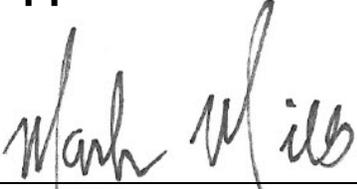
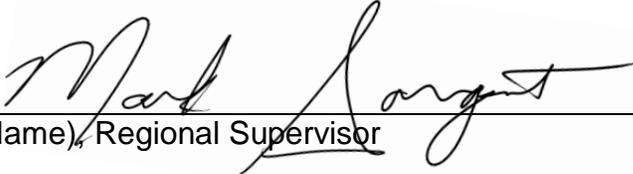
## Acquisition and Disposal of Land

As the City of Portage continues to grow around the Gourdneck State Game Area there are no plans to increase the size of the game area.

## Plan Review

This plan was available for public review and comment on the DNR website between June 19, 2017 and August 15, 2017. During this period 9 comments were received and considered before finalizing this plan. Of the 9 comments, 4 offered suggestions on desired management of the area and 2 asked for further clarification on the plan. The final plan was approved on September 12, 2017 and will be reviewed within 10 years of the approved date.

## Approvals

	3 December 2018
Mark Mills, Field Operations Manager	Date
	3 December 2018
(Name), Regional Supervisor	Date



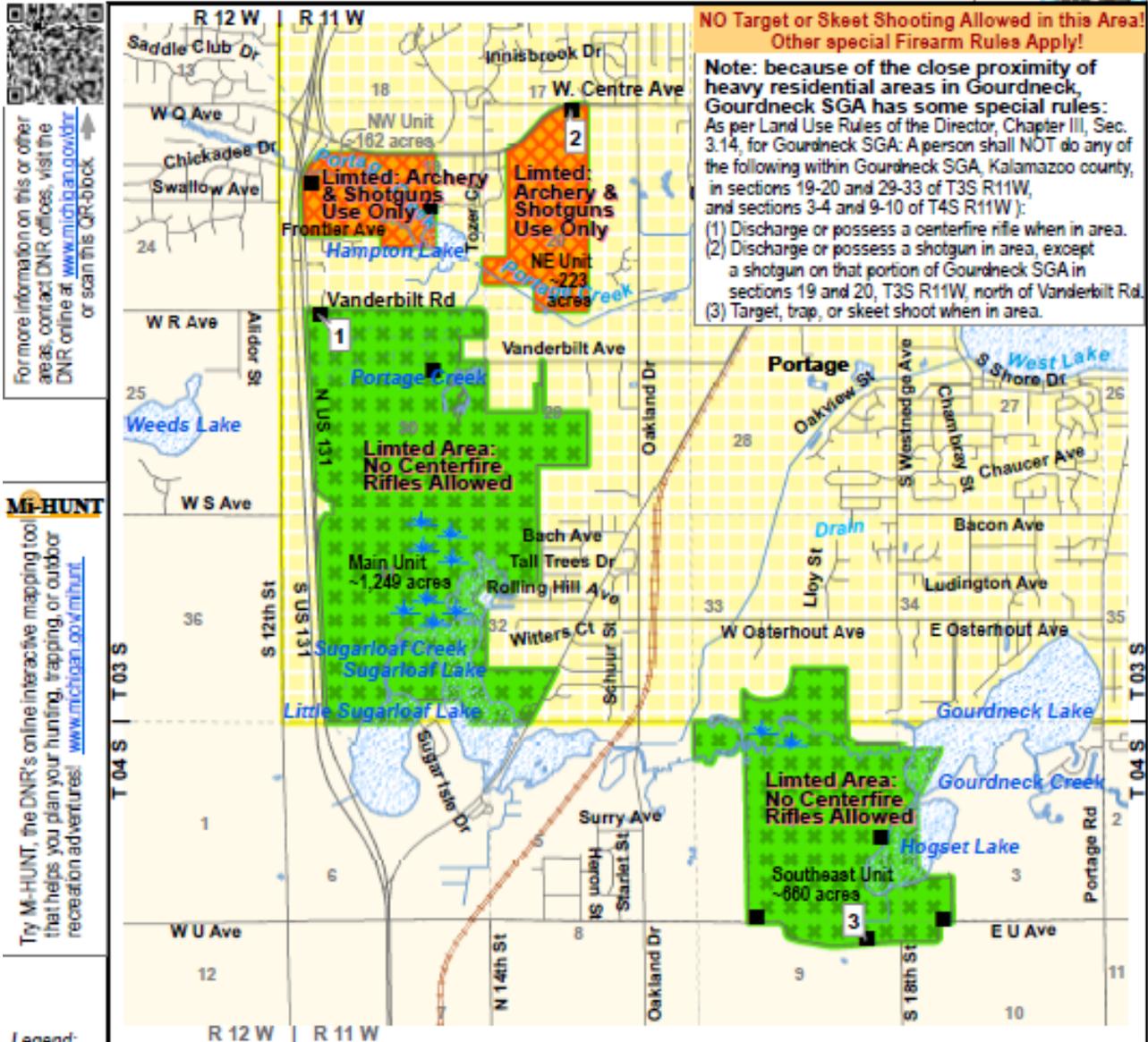
STATE OF MICHIGAN - DEPARTMENT OF NATURAL RESOURCES

# GOURDNECK STATE GAME AREA

- General Map -

Kalamazoo County

Area headquarters: Crane Pond DNR Wildlife Office  
60887 Highway M-40, Jones, MI 49081 ; phone 269- 244-5928



**NO Target or Skeet Shooting Allowed in this Area!  
Other special Firearm Rules Apply!**

**Note:** because of the close proximity of heavy residential areas in Gourdneck, Gourdneck SGA has some special rules: As per Land Use Rules of the Director, Chapter III, Sec. 3.14, for Gourdneck SGA: A person shall NOT do any of the following within Gourdneck SGA, Kalamazoo county, in sections 19-20 and 29-33 of T3S R11W, and sections 3-4 and 9-10 of T4S R11W):  
(1) Discharge or possess a centerfire rifle when in area.  
(2) Discharge or possess a shotgun in area, except a shotgun on that portion of Gourdneck SGA in sections 19 and 20, T3S R11W, north of Vanderbilt Rd.  
(3) Target, trap, or skeet shoot when in area.

For more information on this or other areas, contact DNR offices, visit the DNR online at [www.michigan.gov/dnr](http://www.michigan.gov/dnr) or scan this QR-block

**M-HUNT**  
Try M-HUNT, the DNR's online interactive mapping tool that helps you plan your hunting, trapping, or outdoor recreation adventures! [www.michigan.gov/mhunt](http://www.michigan.gov/mhunt)

- Legend:**
- State Land: Wildlife/Game Area
  - Parking: Prepared Lots
  - Boating: NO Prepared Ramp
  - Roads: Highways or Paved
  - Water: Lakes, Ponds
  - Political: Town-Range-Section Lines (labeled 1-36 near center of block)
  - Other: Railroads
  - Special Weapon Rules & Firearm Limitations in Area: Archery and Shotguns Only!
  - Special Weapon Rules & Firearm Limitations in Area: No Centerfire Rifles Allowed!
  - Special Weapon Rules & Firearm Limitations in Area: NO Target or Skeet Shooting!
  - Gravel or Dirt Roads, Two-Tracks, Trails
  - Rivers, Streams
  - Seas, Streams, Drains
  - Cities or Villages
  - Marsh in Area
  - Power Lines, Pipes

0 0.5 1 2 Miles

**Important:** 150 yards (450 feet) Hunter Safety Zones are enforced around all buildings and structures at all times. Be Safe Always be careful around water and ditch/dikes for deep water!

Look for Watchable Wildlife viewing area signs in this area, for locations and more information about trails or features.

GPS Coordinates at flag points:  
[ 1 ] a west-side parking lot, off Vanderbilt Rd: Lat.42°11'10.8"N, Long.85°38'40.0"W  
[ 2 ] north-east parking lot, off Old Centre Ave: Lat.42°12'02.8"N, Long.85°37'13.0"W  
[ 3 ] south-east parking lot, off E. U Ave: Lat.42°08'31.6"N, Long.85°35'32.2"W



**Hunter Monies Help  
Make This Area  
Possible**



Map Revised 05/27/2015 - Wildlife Div./MLS

Figure 1. Gourdneck State Game Area Map

**Figure 2.** Gourdneck State Game Area Cover Type Map

