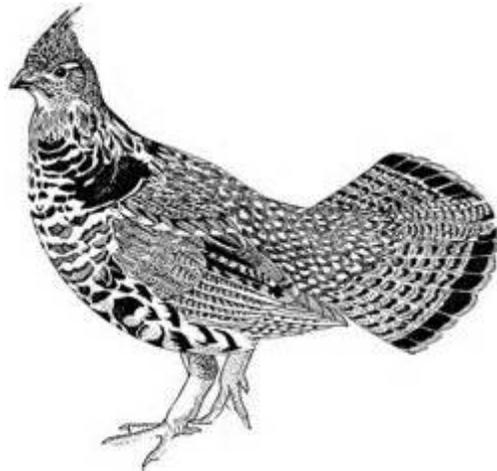


Edmore State Game Area Master Plan



Michigan Department of Natural Resources

Wildlife Division

[Michigan DNR Website](#)

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April 22, 2016

Intended Purpose and General Management Direction

The Edmore State Game Area (ESGA) was dedicated on June 25, 1952. The Natural Resources Commission dedication memo indicated that “the varied cover types and terrain offer good habitat for ruffed grouse, cottontail rabbits, deer and fur bearers with waterfowl being present in limited numbers”.

The majority of land on the game area was purchased with federal Pittman-Robertson Funds, but significant acquisitions were also made using the Natural Resources Trust Fund, through tax reversion, and recreation bond monies. The ESGA is located in the Southwest Region (SWR) of the Lower Peninsula along the Montcalm-Isabella county border (Figure 1). Over time, the ESGA has been expanded to include 3,697 acres (Figure 2) and is managed to provide quality habitat for ruffed grouse, American woodcock, cottontail rabbits and white-tailed deer and for recreational opportunities associated with these species. Forest management practices (selective and clear cutting) have been the primary habitat management technique on the area.

In the future (50-100 years from now) we want the area to continue to contribute to sustainable populations of important wildlife species and to provide valuable hunting recreation

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 (protect 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 wildlife-based recreation, Goal 4-Enhance sustainable wildlife-based recreation use and enjoyment), More Bang For Your Buck concepts (outstanding grouse, woodcock and turkey hunting, challenge of small game 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

True to the intended purpose of the ESGA when it was dedicated in 1952, we will continue to focus our efforts on species and habitats that help meet our goals for the area (Table 1) to provide quality hunting opportunities and our other public trust responsibilities. In addition, guidance provided in the Michigan Woodcock Initiative, the

American Woodcock Conservation Plan, and the Upper Great Lakes Young Forest Initiative will also be considered.

Table 1. A list of species or projects to be worked on during this planning period, reflecting opportunities for habitat or recreational management.

<i>Common Name</i>	<i>Featured Species</i>	<i>T&E, SC Species</i>	<i>Climate Change Vulnerable</i>	<i>Remarks</i>
Cottontail rabbit	<i>X</i>			<i>Brush piles, young forests</i>
Ruffed grouse	<i>X</i>		<i>X</i>	<i>Young forests, aspen</i>
White-tailed deer	<i>X</i>			<i>Young forests, openings, mast trees</i>
Woodcock	<i>X</i>			<i>Young forests, openings</i>

Ruffed grouse and aspen are both predicted to be climate change vulnerable which may impact our ability to effectively meet our desired future conditions outlined in Goal 1 (see below). We will monitor aspen regeneration as part of routine forest inventory and consider alternatives to aspen, as necessary. In general, younger forests are better able to withstand climate change and lowering the average age of forests on the area is likely a good adaptation strategy.

The Michigan Natural Features Inventory (MNFI) Elements of Biodiversity database indicated presence of 2 species listed as Special Concern on the Edmore SGA: grasshopper sparrow (2006) and wood turtle (1986). Grasshopper sparrow habitat will be maintained as brush is removed from idle fields to maintain herbaceous open land. No specific management is prescribed for habitat management for wood turtles at this time and habitat management for selected species should not negatively impact them.

Existing Conditions

The ESGA consists of gently rolling, mostly forested land. A variety of vegetation types can be found on the area including extensive second growth upland forests (mostly aspen, oak, red maple and white pine), lowland forests (silver maple, red maple, green ash, elm) associated with the Pine River drainage, and old fields that are remnants of agricultural activities (Figure 3).

Compared to other southern Michigan game areas, the ESGA provides a significant amount of aspen and other early successional forest cover (Table 2). These young, dense forests provide valuable habitat for the species we are managing for. The presence of significant acres of aspen on the ESGA and the surrounding private land provide perhaps the best opportunity in southern Michigan to manage for grouse and woodcock. Since the ESGA is relatively small (3,697 acres) and has similar habitat throughout the entire area, a set of Goals and Objectives have been selected for the entire area.

Table 2. Current cover types on the Edmore SGA based on MiFi surveys from 2015.

Cover type	Acres	Percent of Game Area
Aspen	1,177	31.8
Oak	182	4.9
Northern Hardwoods	111	3.0
Mixed Upland Deciduous	207	5.6
Low Density Trees	30	0.8
Herbaceous Openland	361	9.8
Natural Pines	12	0.3
Planted Pines	15	0.5
Mixed Upland Conifers	12	0.3
Upland Shrub	119	3.2
Lowland Deciduous Forest	1,064	28.8
Lowland Coniferous Forest	174	4.7
Lowland Mixed Forest	72	1.9
Lowland Shrub	122	3.3
Emergent Wetland	32	0.9
Water	7	0.2
Total	3,697	

Recreational Use

The ESGA provides a host of recreational opportunities for local residents and visitors alike, including hunting, trapping, bird watching and wildlife viewing. 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 on the game area include approximately 300 acres of timber management activities every 10 years through contracts with local loggers, plus thousands of hunter use days per year that provide a direct boost to local restaurants, sporting goods stores and convenience stores and gas stations.

Management Direction

The desired future conditions for the Edmore State Game Area are outlined in table 3.

Table 3. Desired future condition of cover types and habitat issue direction on the Edmore SGA.

Cover type and Habitat Issues	Desired Future Condition
Aspen	Increase
Oak	Maintain
Northern Hardwoods	Maintain
Mixed Upland Deciduous	Decrease
Herbaceous Open land	Maintain
Natural Pines	Maintain
Red Pine	Maintain
Mixed Upland Conifers	Maintain
Lowland Deciduous Forest	Maintain
Lowland Coniferous Forest	Maintain
Lowland Mixed Forest	Maintain
Lowland Shrub	Maintain
Emergent Wetland	Maintain
Agriculture	None
Warm Season Grass	None
Cool Season Grass	Maintain
# of Forest Openings	Maintain
Grassland Patches > 150 Acres	None
Grassland Patches >250 Acres	None
Mature Forest	Decrease
Unfragmented Forest	Maintain
Riparian Corridor	Maintain

Goals, Objectives, and Management Actions

What follows is the strategic direction for the Edmore 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 the ESGA.

Goal I sustainable populations of ruffed grouse and American woodcock on the SGA and the surrounding area.

Rationale: grouse and woodcock are highly desirable game species and managing for their habitat benefits numerous other wildlife species. White-tailed deer also benefit from Actions taken under this Goal.

Metrics: staff observation, hunter surveys and standardized woodcock surveys; assessment of aspen trends through time based on forest inventory data, number of suitable forest openings.

Objective A. Increase the treatable aspen cover type on the ESGA to approximately 1,200 acres or 33% of the area and provide a balance of age classes on a 40 year rotation (25% at age 0-10, 25% at age 11-20, 25% at age 21-30, 25% at age 31-40) in a manner that optimizes the spatial arrangement for the benefit of grouse and woodcock by 2065.

Action 1. Establish an aspen harvest regime (~300 acres every decade) that will expand and improve the aspen type and optimize the age classes and juxtaposition of aspen stands on the SGA.

Objective B. To provide suitable forest openings (mostly 1-10 acres in size), comprising 360 acres (10% of the ESGA) for breeding and roosting habitat for woodcock within aspen complexes by 2026.

Action1. Maintain and create small herbaceous openings at appropriate locations throughout the Forested Management Area.

Goal II sustainable populations of white-tailed deer on the Edmore SGA.

Rationale: White-tailed deer are highly desirable game species. White-tailed deer also benefit from Actions taken under Goal I (above) as young dense forests provide excellent food and cover for deer.

Metrics: staff observation and hunter surveys; assessment of aspen and oak types within IFMAP, number of suitable forest openings.

Objective A. Increase the treatable aspen cover type on the ESGA to approximately 1,200 acres (33% of the area) and provide a balance of age classes on a 40 year rotation (25% at age 0-10, 25% at age 11-20, 25% at age 21-30, 25% at age 31-40).

Action 1. Establish an aspen harvest regime (~300 acres every decade) that will result in a suitable amount of young forest on the SGA.

Objective B. To provide suitable forest openings (mostly 1-10 acres in size), comprising 360 acres (10% of the SGA) for feeding areas by 2023.

Action1. Maintain and create small herbaceous openings at appropriate locations throughout the SGA.

Objective B. Maintain the current oak cover type (180 acres) and increase the oak component in non-oak stands.

Action 1. Maintain current oak stands by not harvesting for at least 50 years.

Action 2. When managing other forested cover types, identify opportunities for maintaining or increasing the oak component by leaving oaks uncut.

Goal III sustainable populations of cottontail rabbit on the SGA

Rationale: rabbits are popular game species and will benefit from management implemented for Goals I and II above

Metrics: staff observation and discussion with hunters; number of brush piles created

Objective A. Provide suitable escape cover by creating brush piles each year.

Action 1. Establish a timber harvest regime (associated with Goals I and II) that will require loggers to create 2 brush piles for every acre harvested resulting in 60 brush piles per year (on average).

Objective B. Provide suitable forest openings (mostly 1-10 acres in size), comprising 360 acres (10 % of the SGA) for nesting and feeding habitat for rabbits by 2023.

Action1. Maintain and create small herbaceous openings at appropriate locations throughout the SGA (associated with Goal I) by 2023.



Figure 1. Location of the Edmore SGA.

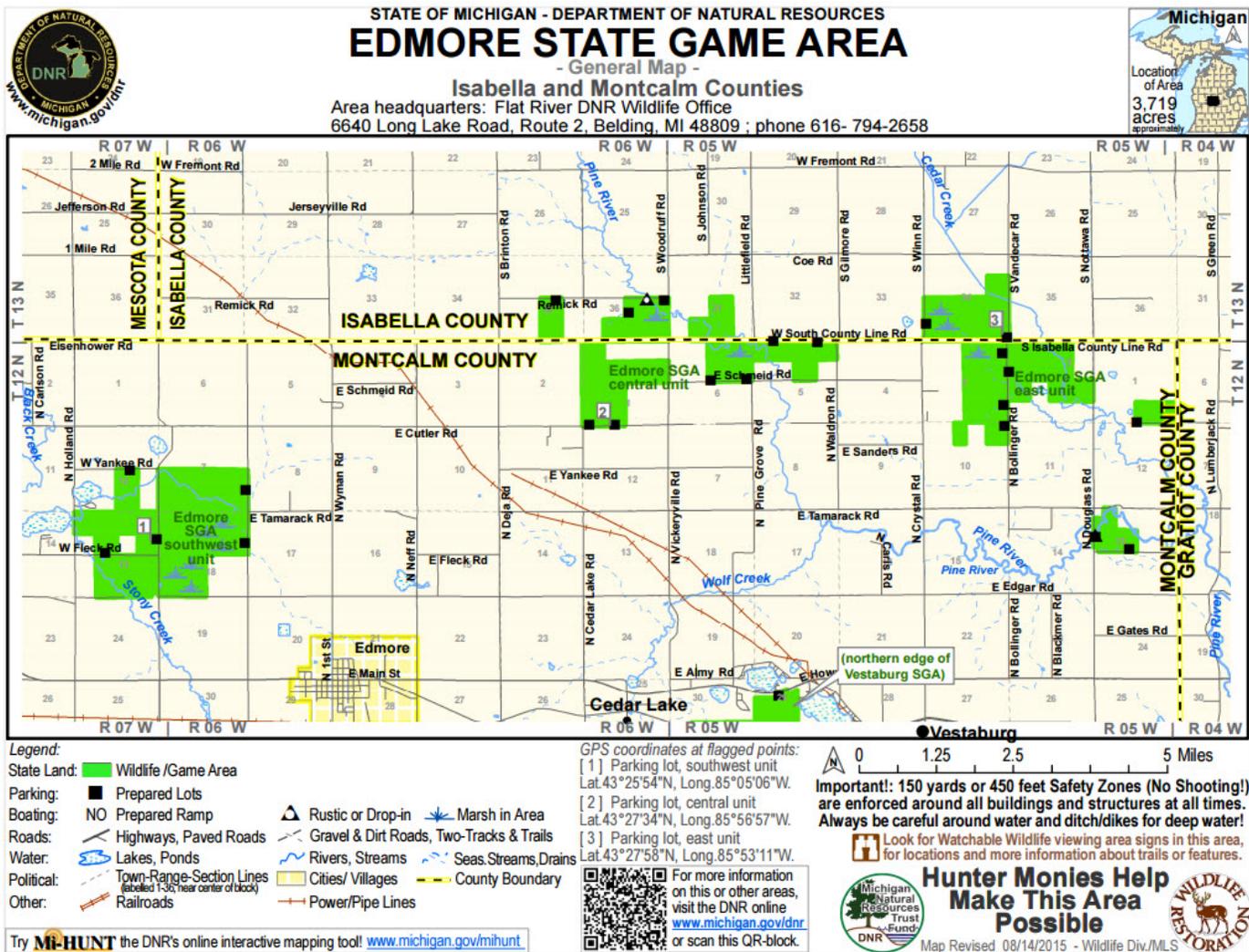


Figure 2. Edmore SGA boundaries.

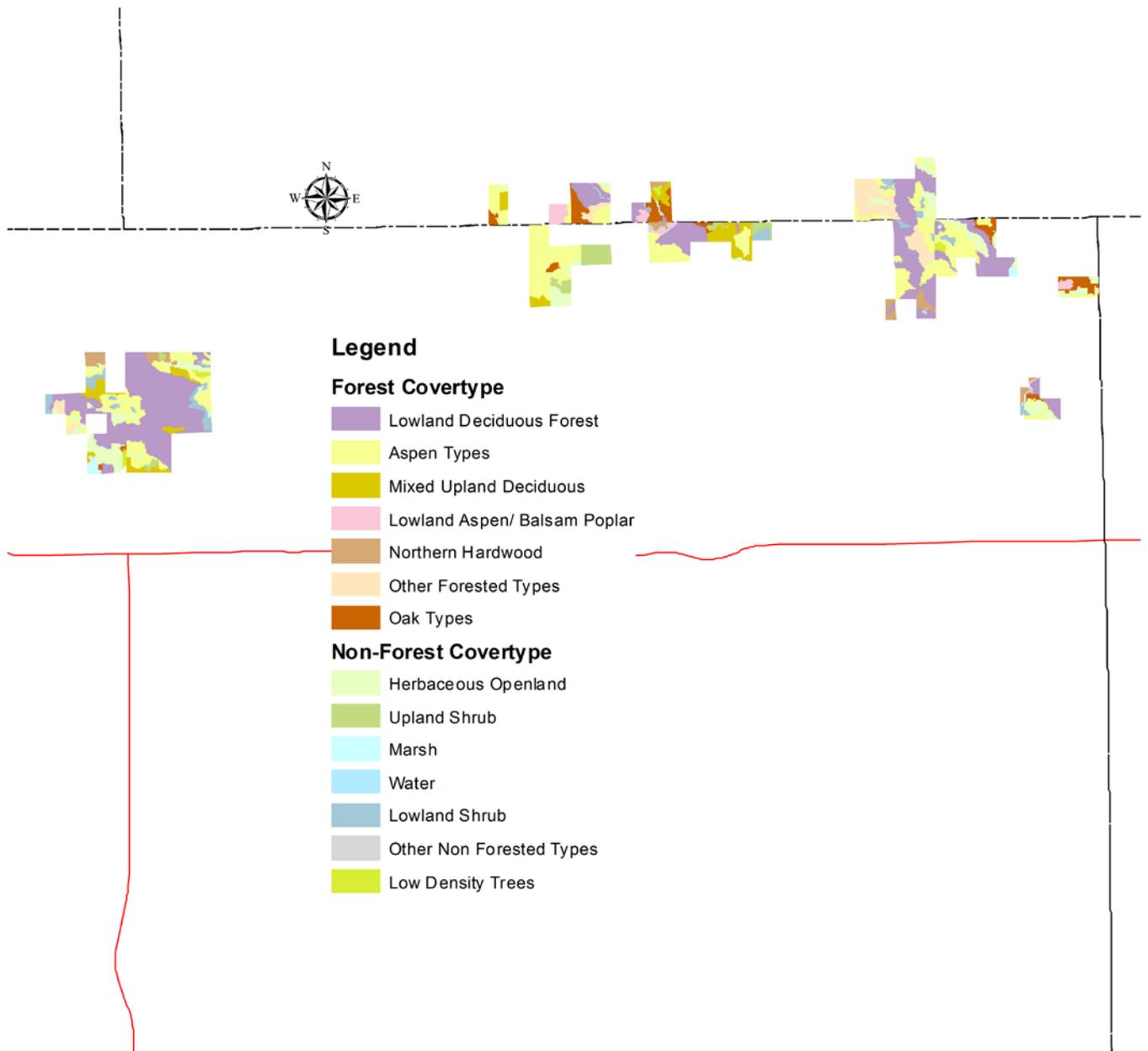


Figure 3. Map representing the major habitat cover type classes in the SGA.

Acquisition and Disposal of Land

This is an important game area that provides a host of recreational opportunities for local resident and visitors. Our overall goal is to continue to provide these opportunities. Since the ESGA is located in southern Michigan, the land acquisition strategy for the SGA is to fill in state ownership by acquiring available blocks located within and among current state ownership and to expand the area by obtaining appropriate parcels that may be outside the current ownership but within the acquisition boundary. Parcels will

be evaluated as they become available and will be acquired on a willing seller basis only.

Public Input

This plan will be available for public review and comment on the DNR website between July 1, 2016 and July 31, 2016. Changes will be made, as necessary, based on public feedback. Once the plan is approved it will be placed on the [DNR website](#), and will be reviewed again within 10 years of the approved date. Send comments to: John Niewoonder NiewoonderJ@michigan.gov

Approvals

(Name), Field Operations Manager Date

(Name), Regional Supervisor Date