



Langston State Game Area

Master Plan



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

**WILDLIFE DIVISION
JOHN NIEWOONDER
FEBRUARY 18, 2016**

Intended Purpose and General Management Direction

The Langston State Game Area (LSGA) was dedicated on August 3, 1950. The Natural Resources Commission dedication memo indicated that “the area is practically all wild timbered land” and “game species found on the area are primarily those of the forest, such as deer, grouse, squirrels, and raccoon”.

The original acquisition consisted of 620 acres and over time, the LSGA has been expanded to include 3,252 acres (Figure 1). The land comprising the LSGA was primarily acquired with Pittman-Robertson (P-R) funds (90%), with other funds including the Michigan Land/ Natural Resources Trust Fund and the Recreation Bond Fund contributing to a lesser degree. The LSGA is located in the Southwest Region (SWR) of the Lower Peninsula in western Montcalm County (Figure 2) and has been managed to provide quality habitat for ruffed grouse, American woodcock, wild turkey, cottontail rabbits, 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, Goal 4-Increase public participation in hunting and trapping), 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 game area when it was dedicated in 1952, we will continue to focus our efforts on species and habitats (Table 1) that help meet our goals to provide quality hunting opportunities and our other public trust responsibilities such as following the guidance provided in the Michigan Woodcock Initiative, the American Woodcock Conservation Plan, and the Upper Great Lakes Young Forest Initiative.

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

Common Name	Featured Species	T&E, SC Species	Climate Change Vulnerable	Remarks
Cottontail rabbit	X			Brush piles
Wild turkey	X			Diverse forests, mast trees
Ruffed grouse	X		X	Young forests, aspen
White-tailed deer	X			Openings, food plots, mast trees
Woodcock	X			Young forests, Openings

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 shocks and lowering the average age of forested area is likely a good adaptation strategy.

The MNFI Elements of Biodiversity database indicated presence of 5 species of interest due to relative rarity: frosted elfin (1989-State Threatened), Henry's elfin (1979-State Threatened), Karner blue (Federally Endangered-1980), ottoe skipper (1964-State Threatened), and Perseus duskywing (1982-State Threatened) on the LSGA. No specific management is prescribed for habitat management for these species at this time since observations are greater than 25 years old, presence has not been re-confirmed and significant habitat changes have occurred that make presence and potential for these species very unlikely.

Existing Conditions

The LSGA 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 oak, aspen, black cherry, red maple and white pine), lowland forests (silver maple, green ash, elm) associated with the Flat River and associated drainages and some old fields that are remnants of agricultural activities, and pine plantations (Figure 3).

Compared to other southern Michigan game areas, the LSGA provides a significant amount of aspen and other early successional forest cover (Table 2). These forests provide valuable habitat for the species we are managing for. The presence of significant acres of aspen on the LSGA and the surrounding private land provide an opportunity to manage for grouse and woodcock that is not found on most southern Michigan SGAs. Since the LSGA is relatively small (3,252 acres) and has mostly similar

habitat throughout the entire area, a single set of Goals and Objectives have been selected for the entire area.

Table 2. Current cover types on the Langston SGA based on MiFi surveys from 2014.

Cover type	Acres	Percent of Game Area
Aspen	494	15.2
Oak	1,343	41.3
Mixed Upland Deciduous	521	16.0
Red Pine	157	4.8
Lowland Deciduous Forest	260	8.0
Lowland Coniferous Forest	68	2.1
Lowland Shrub	178	5.5
Upland Shrub	47	1.4
Water	123	3.8
Other	61	1.9
Total	3,252	

Recreational Use

The LSGA 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 30 acres of timber management activities per year through contracts with local loggers, plus over 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 condition for the Langston State Game Area is demonstrated in the following table.

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

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

Goals, Objectives, and Management Actions

What follows is the strategic direction for the Langston 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 LSGA.

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; assessment of aspen trends through time based on forest inventory data, number of suitable forest openings

Objective A. Increase the aspen cover type on the SGA by 5% to 475 acres and move towards a more balanced age class distribution 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 2025

Action 1. Establish an aspen harvest regime (~110 acres every decade) that will expand and improve the aspen type and optimize the age classes and juxtaposition of aspen stands on the Forested Management Area

Objective B. To provide suitable forest openings (1-10 acres in size), comprising 5 % of the SGA for breeding and roosting habitat for woodcock within aspen complexes by 2023

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

Goal II sustainable populations of white-tailed deer and wild turkeys on the Langston SGA

Rationale: White-tailed deer and wild turkeys are highly desirable game species and managing for their habitat, especially the oak component of the forest, benefits numerous other wildlife species. Deer and turkeys also benefit from Actions taken under Goal I (above) as young dense forests provide excellent food and cover for both species.

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

Objective A.

Maintain most of the current extent (~1,000 acres) of oak cover type on the SGA and balance the age class distribution

Action 1. Develop and implement an adaptive oak management strategy by 2018

Action 2. Harvest approximately 175 acres of oak forest during the next decade to encourage oak regeneration and recruitment

Objective B. Maintain or increase the oak component in non-oak stands

Action 1. When managing other forested cover types, including red pine plantations, identify opportunities for maintaining or increasing the oak component

Objective C. To maintain suitable forest openings (1-10 acres in size), on 160 acres (5 % of the Langston SGA) for foraging and habitat for deer

Action1. Maintain herbaceous openings at appropriate locations throughout the Langston SGA

Goal III sustainable populations of cottontail rabbit on the SGA

Rationale: rabbits are popular game species that 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 approximately 50 brush piles per year (on average)

Action 2. Use DNR staff and volunteers to build 15 brush piles each year

Objective B. Provide suitable forest openings (1-10 acres in size), comprising 5 % 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

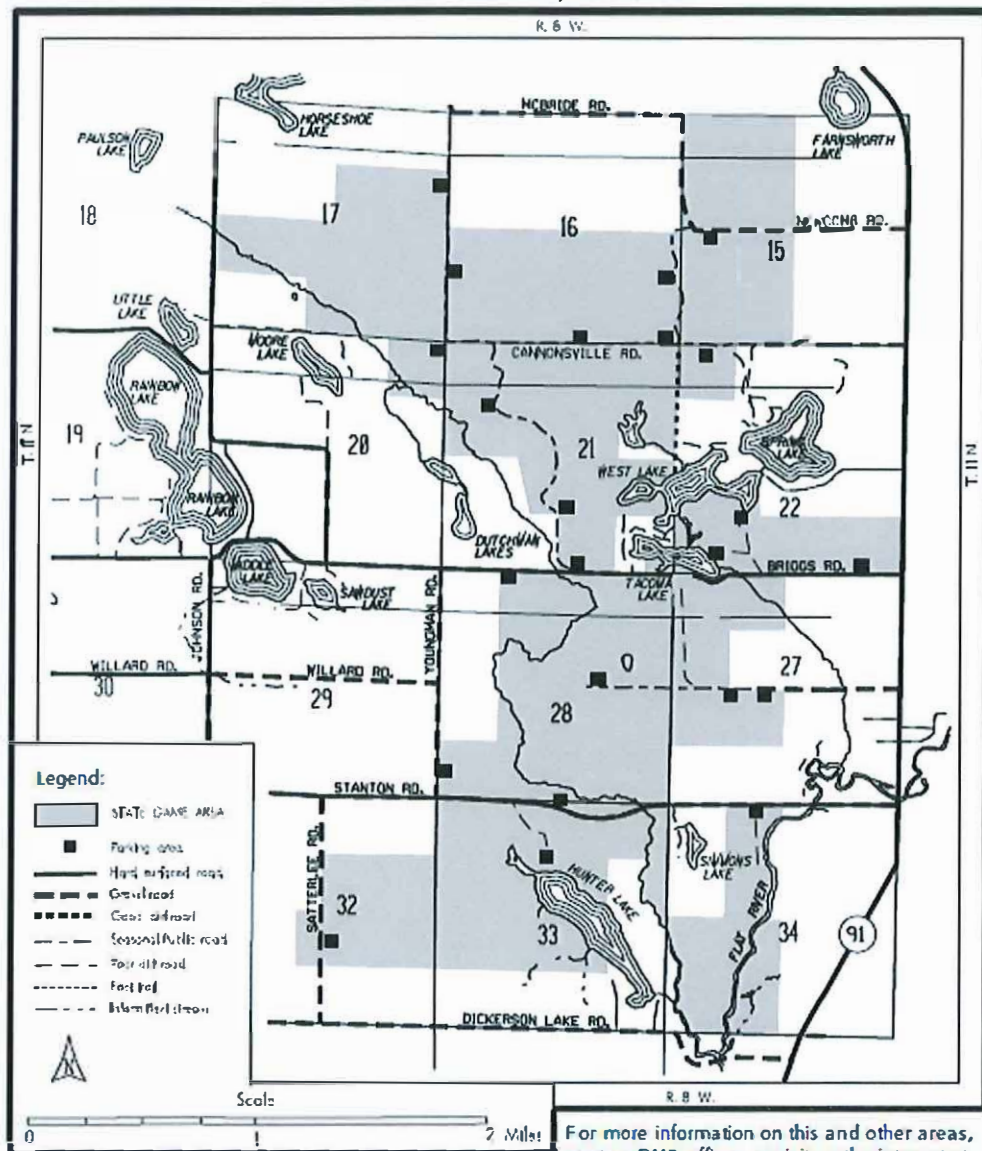


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LANGSTON STATE GAME AREA

MONTCALM COUNTY, MICHIGAN



Hunter Monies Made This Area Possible

DNR Wildlife Map - area 590201 (was 0909) rev. 10/2006 -MILS



Figure 1. Langston SGA boundaries.



Figure 2. Location of the Langston SGA.

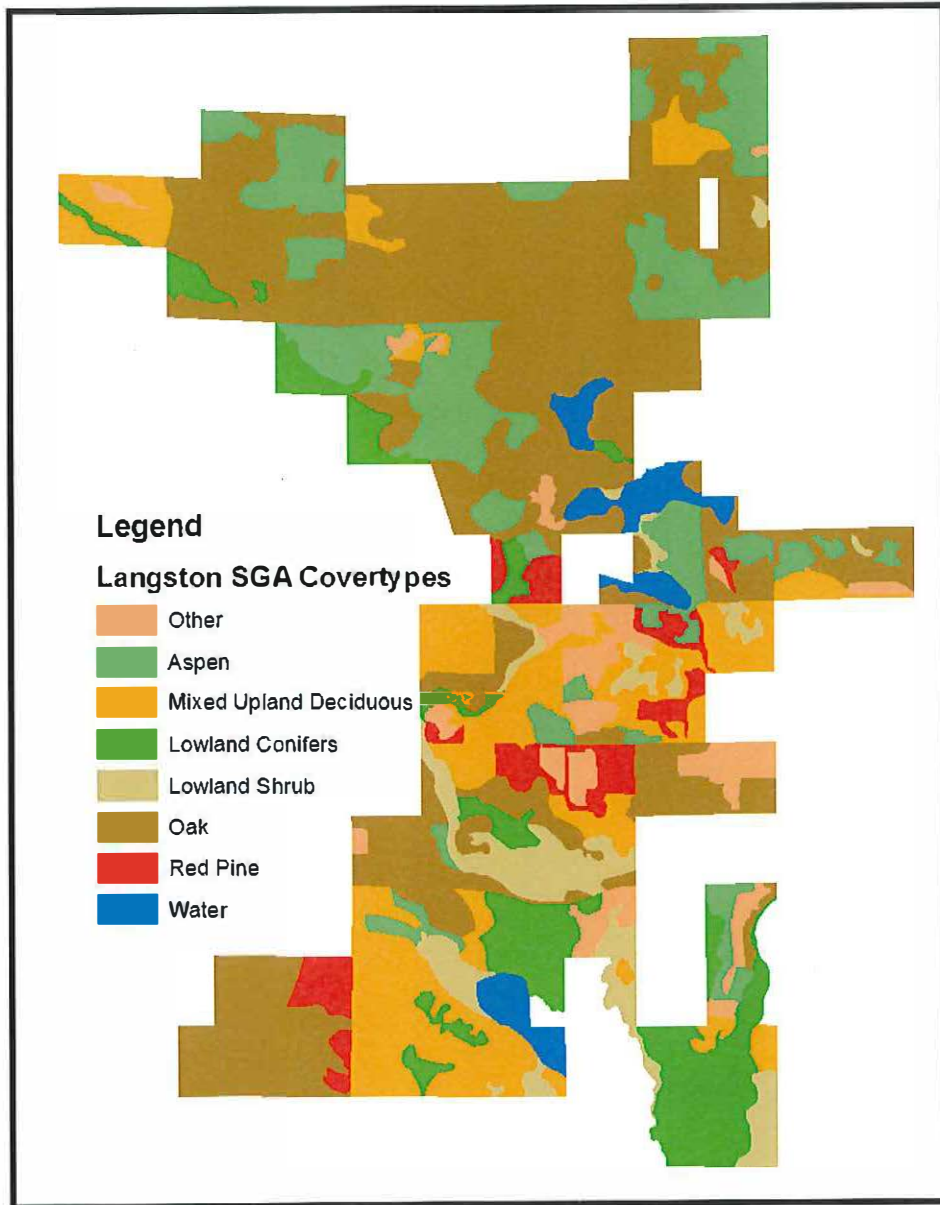


Figure 3. Langston SGA cover types.


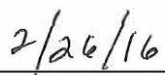


Acquisition and Disposal of Land

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 LSGA 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 was available for public review and comment on the DNR website between January 6, 2016 and February 9, 2016. During this period 11 comments were received and considered before finalizing this plan. The final plan was approved on February 18, 2016 and will be reviewed within 10 years of the approved date

Approvals

 _____ John Niewoonder, Field Operations Manager	 _____ Date
 _____ John Niewoonder, Acting Regional Supervisor	 _____ Date