

# Tuscola State Game Area Master Plan



Lead Author: Don Bonnette, Wildlife Biologist – Cass City (01/07/2014)



**Michigan Department of Natural Resources**

**[Michigan DNR Website](#)**

**Wildlife Division**

IC 2039 (Rev. 6-11-2012)

## Strategic Plan

When setting the desired future conditions, it is necessary to consider the purpose for which the property was acquired by the state, current land cover conditions, and future social and economic forces that could influence management strategies. The intended purpose for the Tuscola SGA was and still is the maintenance of upland habitat for optimum numbers of white-tailed deer, cotton-tailed rabbits, ruffed grouse, woodcock and wild turkeys. In addition, Tuscola SGA offers some opportunity for managing special wildlife species such as red-shoulder hawk, northern goshawk and cerulean warbler. However, in some cases enhancing and conserving these special species may be in conflict with management for others that provide hunting and trapping opportunity. As this plan is fully implemented these conflicts will be addressed and a mutually beneficial outcome will be sought to move forward. The purpose of this plan is to simply detail a more strategic approach.

The Tuscola SGA Master Plan was developed in conjunction with and is consistent with goals and objectives for SGA's and Wildlife Areas identified in the Southeast Michigan Regional Wildlife Area Management Plan. It also supports goals and objectives in the Michigan Wildlife Action plan.

The Tuscola SGA is located near the center of Tuscola County along the south bank of the Cass River, two miles south of the city of Caro and 25 miles to the east of Saginaw. Adjacent private lands are mostly forested with mixed upland hardwoods and serve as primary residences and recreational property. Soils on these lands, like those on the game area, are not well suited to large scale agriculture; as such much of the surrounding private lands remain forested. The Tuscola SGA land acquisition project was approved in 1938 as the first SGA in the Southern Lower Peninsula Region (Region III). In 1935 the National Park Service approved a study of the Tuscola area as a potential National Park due to the fact that the land could not support agriculture and was better suited for recreational purposes. The National Park Service did not follow up on the study with land purchases, but the Michigan Conservation Department did by purchasing the first parcel in 1939 and continued acquiring to the present day bringing the total land acquisition to 9,032 acres.

Most of the Tuscola SGA is level to slightly rolling with poorly drained sandy soils of relatively low fertility. The game area is largely forested with second growth hardwood with aspen types comprising nearly half of all forest cover types and nearly a third consisting of lowland deciduous forest. Refer to Appendix 2 for a detailed forested cover type analysis. The aspen types and other upland forest cover types are found on relatively higher and well drained portions of the area. The many poorly drained sites with water at or near the surface for much of the year are dominated by lowland deciduous forest. A relatively small proportion of the game area consists of forest openings and old farm fields, some planted to cool and warm season grass mixtures and many others filling in with early

successional brush. Appendix 2 provides a more detailed non-forest cover type analysis derived from MiFi inventory data.

What follows is the strategic direction for Tuscola SGA. This plan describes the **goals** or desired future condition for the area, the **objectives** under each goal, and the **actions** associated with each objective. For the purposes of this master plan, the following definitions will be used:

**Goal** – A desired future condition of the area.

**Objective** – A management approach or strategy that the best science suggests can be used to move the area toward the Goal. An objective is a quantifiable input to be completed within a defined timeframe that contributes towards accomplishing the goal.

**Action** – An operational means to accomplish an objective. An action is a step needed to complete an objective and is described in sufficient detail to inform planning. An action is a quantifiable input to be completed within a defined timeframe that contributes towards accomplishing the objective.

***It is expected to take approximately ten years to complete all the objectives.***

## **Desired Future Conditions**

**Goal I** Maintain forested and non-forested habitats for optimum numbers of white-tailed deer, cotton-tailed rabbits, ruffed grouse, woodcock and wild turkeys to provide quality hunting experiences.

**Rationale:** 1) This area was dedicated to provide hunting recreation for Michigan citizens; 2) each of the species listed above are listed as Featured Species; 3) one of the DNR's priorities is to reverse the trending loss of hunters and trappers, this goal will help ensure hunting opportunity remains in Tuscola County; 4) one of the objectives in the Wildlife Division's GPS is related to small game hunting opportunity; 5) there are good populations of all five species on the SGA; 6) this goal address the following strategies in the GPS: 1.1.5, 1.1.7, 2.1.1-4, 4.3.3, 4.3.4; 7).

**Assessment:** 1) direct observation by WLD staff and conversations with hunters and users on the SGA will be used to assess success of this goal; 2) annual review of work plan compared to activities completed as described below.

**Objective A:** Maintain and update forest and non-forested inventory, create habitat treatments and track habitat treatments utilizing the Michigan Forest Inventory (MiFI) data.

**Action 1.** Assign areas of interest, create and track habitat treatments for the next 10 years.

**Action 2.** Submit application for Section 106 review to the State Historic Preservation Officer (SHPO) to obtain clearance on the entire SGA for ground disturbing habitat management activities such as timber harvest.

**Objective B:** Maintain a minimum of 25 acres annually as forest openings in appropriate locations to provide feeding, hiding, nesting, singing/display areas and loafing cover for rabbits, deer, turkeys and woodcock.

**Action 1.** Using current forest inventory, identify appropriate sites to maintain as openings.

**Action 2.** Develop a work plan to treat openings at least once every three years.

**Action 3.** Create brush piles along edges in conjunction with brush clearing operations and nearby timber harvests.

**Objective C:** Continue to maintain or expand aspen cover types by harvesting a minimum of 100 acres annually over the next 10 years through commercial timber sales. Secondarily, increase aspen age class diversity where necessary to provide multiple habitat requirements for grouse, woodcock, deer, rabbits and turkeys.

**Action 1.** Use current forest inventory to identify aspen stands and other forest cover types where aspen comprises a minimum of 20% canopy cover for commercial harvest.

**Action 2.** Establish rotation age of 50 years for aspen cover types to ensure even age class distribution across the landscape. Ideally, four aspen age classes of 0-10 years, 11-20 years, 21-40 and 41+ would be within ¼ mile of each other across the area.

**Action 3.** Where oak is present in aspen types, develop harvest prescriptions designed to ensure its long term persistence.

**Action 4.** Continue to use harvest specifications that require the retention of coarse woody debris in general. Those specifications with particular emphasis on snags, drumming logs and brush piles must be utilized where appropriate.

**Objective D:** Continue thinning or final harvest of red pine, white pine and jack pine cover types on a minimum of 10 acres annually with particular emphasis on those stands with advanced oak regeneration in the understory.

**Action 1.** Use current forest inventory to identify pine cover types suitable for harvest with emphasis on those with significant advanced oak regeneration in the understory.

**Action 2.** Establish a rotation age of 60 years for all pine types and retain enough pine over story in initial thinning operations to shelter oak regeneration.

**Action 3.** Use forest harvest specifications to retain white pine supercanopy and legacy trees.

**Action 4.** Continue to use harvest specifications that require the retention of coarse woody debris in general. Those specifications with particular emphasis on snags, drumming logs and brush piles must be utilized where appropriate.

**Objective E:** Initiate forest treatments on lowland hardwood and mixed upland hardwood types on a minimum of 100 acres annually.

**Action 1.** Use current forest inventory to identify lowland and upland hardwood cover types suitable for harvest.

**Action 2.** Use current forest inventory to identify lowland hardwood sites dominated by ash or where ash is a significant component. Given the presence of the Emerald Ash Borer, these stands will be given harvest priority over all other lowland types.

**Action 3.** Use appropriate silvicultural prescriptions and harvest specifications on lowland types to ensure their long-term persistence on the landscape.

**Action 4.** Use current forest inventory to identify mixed upland hardwood sites with a minimum of 20% aspen canopy cover (or 30 sq. ft. BA) for possible conversion to aspen types.

**Action 5.** Continue to use harvest specifications that require the retention of coarse woody debris in general. Those specifications with particular emphasis on snags, drumming logs and legacy tree retention will be utilized where appropriate.

**Goal II** Maintain boundary integrity and infrastructure in a manner that is consistent with Goal I and associated objectives.

**Rationale:** 1) the area provides recreational opportunities related to wildlife; 2) the DNR Wildlife Division supports consumptive and non-consumptive wildlife related recreational activities that promote our state's wildlife heritage; 3) sufficient parking lots, work roads, gates and signs are required for users to take advantage of recreational opportunities; this goal addresses the following strategies in the GPS: 3.2.3, 4.3.4, 4.5.2, 6.1.2, 9.3.1.

**Assessment:** Discussions with users and observations of use.

**Objective A:** Maintain 36 parking areas for appropriate numbers of users.

**Action 1.** Perform monthly inspection of parking areas

**Action 2.** Maintain access to parking areas with annual grading and trash removal as needed.

**Objective B:** Maintain boundary signage and maps that identify SGA boundaries and rules.

**Action 1.** Perform monthly inspection of signage

**Action 2.** Ensure SGA maps are updated and available

**Action 3.** Resolve trespass issues through the trespass resolution process

**Objective C:** Maintain 25 gates and other vehicle barriers to prevent unauthorized motorized vehicle access.

**Action 1.** Perform monthly inspection of gates and vehicle barriers

**Action 2.** Identify and close sites of unauthorized access

## **Recreational and Commercial Uses**

Recreational and commercial uses on the area that are not incidental to our management for the purposes described above are generally not allowed. These uses can be allowed, however, under the following circumstances:

1. The uses must not interfere or conflict with the wildlife conservation purposes of the area described above.
2. The DNR 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 DNR 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 DNR always reserves the ability to disallow activities previously allowed as wildlife conservation needs dictate.

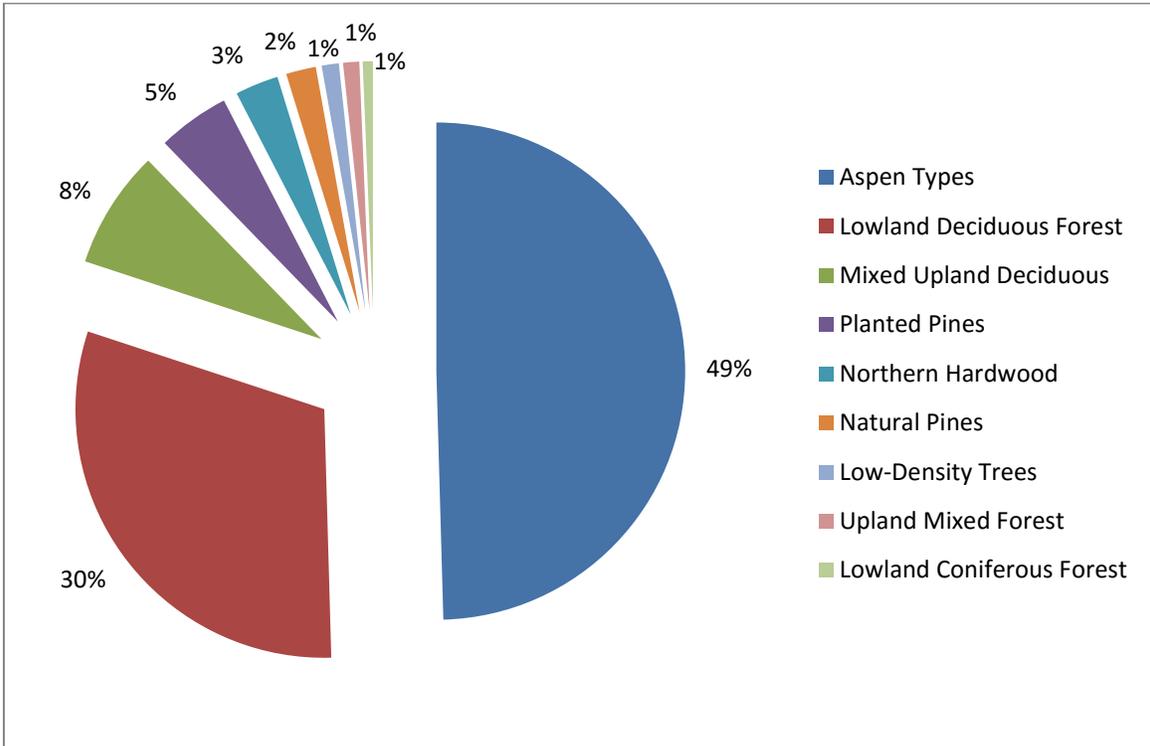
There are currently no commercial uses on the Tuscola SGA other than commercial timber harvest. Commercial timber harvests are utilized to achieve forest habitat management objectives. The DNR will continue to monitor existing commercial and recreational uses for interference with the intended purposes of the area as described in this plan.

## **Acquisition and Disposal of Land**

Acquisition priorities will focus on those parcels that provide the best wildlife habitat management potential, consolidate state ownership within a section, reduce boundary posting and eliminate boundary trespass and encroachment issues. Each parcel that becomes available and is considered for acquisition will be evaluated using these criteria.

# Appendix 1: State Game Area Map

## Appendix 2



**Figure 1:** Tuscola SGA forested cover type analysis based on Michigan Forest Inventory data. Total forested acreage = 7,979 acres.

