MICHIGAN DEPARTMENT OF NATURAL RESOURCES – <u>www.michigan.gov/dnr</u> Wildlife Division



Featured Species Habitat Management Guidance for <u>Cottontail</u>

Latin Name: Sylvilagus floridanus

Scope: Southern Lower Peninsula

Rationale - why we value the species and the problem for the species:

The eastern cottontail is a valued small game species. In 2010, 41,000 hunters spent 232,000 days pursuing cottontails in the southern Lower Peninsula (SLP; Frawley 2012). The cottontail is a "gateway" species that frequently introduces individuals to hunting. It is a primary prey species for many raptors and carnivores. Although harvest per effort has increased over the past 50 years, it is thought that more specialized hunters targeting better habitat have masked a general declines in cottontail numbers. Islands of suitable cottontail habitat (grasslands associated with early successional woodlots) are becoming smaller and increasingly isolated, negatively impacting cottontail numbers (Edwards et al. 1981).

Habitat Need - the cause & effect relationship between habitat and species and its primary limiting habitat need:

The primary habitat need for cottontails is an abundance of well-distributed escape cover (hedgerows, fencerows, brushy areas, shrub-land, regenerating woodlots, and switchgrass) interspersed with its preferred foods. Summer food is mostly grasses and forbs, while winter food is dominated by the bark, buds, and twigs of low-lying woody vegetation (Allen 1984). Preferred escape cover is 3 to 6 feet tall woody vegetation associated with early to mid-succession in regenerating woodlots (Allen 1984). Mean distances traveled to forage is 100 yards (Janes 1959) and mean home range is less than 10 acres (Allen 1984). Cottontails also do well in row crops associated with farmsteads (Mankin and Warner 1999).

Habitat Objectives - the treatment or management to address the primary limiting habitat need:

- 1) Maintain or increase the amount of grasslands adjacent to shrub-lands or early successional forests;
- 2) Maintain a consistent supply of shrub-lands or regenerating woodlots adjacent to row crops and grasslands;
- Construct brush piles in fence rows, hedgerows, and recently harvested woodlots adjacent to grasslands and row crops;
- 4) Where possible, retain or encourage brushy fencerows and hedgerows; and
- 5) Where possible, provide technical assistance to private landowners.

Priority Geographic Areas – the specific geographic areas where we should focus management for the species: The 33 SLP Wildlife project areas which identify cottontail as a featured species, and private lands in eastern and western SLP counties.

Priority Landscapes – the landscape, setting, or cover-type where we should focus management within the areas above: Where grasslands or row crops are associated with shrubland or regenerating woodlots.

Population Goal - the goal for the species, its habitat, or a stakeholder's actions: The goal is an increase in the number of reported cottontail hunters and cottontails harvested.

Evaluation Method - the monitoring method to measure progress towards the goal above:

Monitor cottontail harvest and hunter participation through annual small game hunter surveys. Cottontail populations will be monitored on a coarse scale through small game hunter surveys. The level of complaints or concerns about cottontail populations will be monitored on a local scale.

Incidental Species – other species which may benefit from management for this species:

Bobolink; eastern bluebird; eastern meadowlark; ring-necked pheasant; wild turkey; and white-tailed deer.

References - citation for documents referenced in this guidance:

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- Edwards, W.R., S.P. Havera, R.F. Labisky, J.A. Ellis, R.E. Warner. 1981. The abundance of cottontails in relation to agricultural land use in Illinois (U.S.A.) 1956-1978, with comments on mechanism of regulation. *In* Proceedings of the world lagomorph conference. K. Meyers and C.D. MacInnes, eds. University of Guelph. 1:761-789, August 1979, Guelph, Ontario. 983pp.
- Frawley, B. J., 2012. 2010 Small Game Harvest Survey Wildlife Division Report No. 3542 Michigan Department of Natural Resources.
- Janes, D.W. 1959. Home range and movements of the eastern cottontail in Kansas. University of Kansas Publication, Museum of Natural History, 10:553-572.
- Mankin, P.C. and R.E. Warner. 1999. Responses of Eastern Cottontails to Intensive Row-Crop Farming. J. Mammalogy 80: 940-949.