



Incentives to Encourage Landowners' Management for New England Cottontail Rabbit Habitat in New York's Eastern Hudson Valley

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INTRODUCTION

The New England cottontail (NEC) is a rabbit that lives in New York and parts of New England. Unfortunately, the young forest habitat that these rabbits depend on to find food, raise their young, and escape predators has been lost, putting NEC at risk for possible extinction. Across NY, the amount of young forest has declined due to development and other changes in land use. This decline has been detrimental to NEC and other wildlife that rely on young forests⁺. In lieu of natural disturbance, active forest management can create young forests. Eighty percent of forestlands in NY are privately owned¹, making landowners in the state essential to creation of young forests. The low aesthetic value of young forests, the cost, and the time involved in management, makes encouraging private management for forests difficult². The extent of privately owned forestland in NY requires incentives to encourage private landowners to engage in habitat management^{3,4}.

STUDY DESIGN

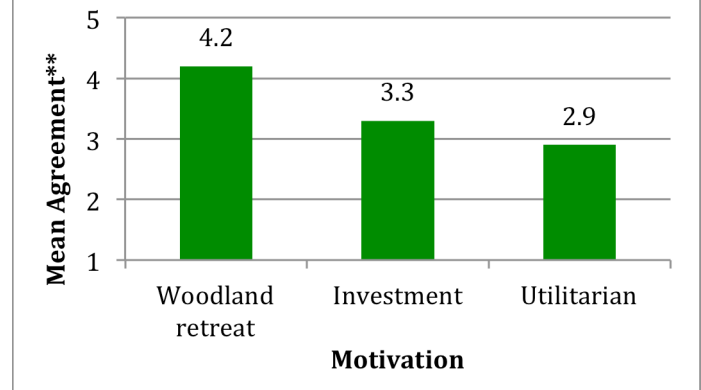
The objectives of this study were to: 1) understand how and why private forest landowners in the NEC range in NY manage their lands for wildlife habitat, specifically NEC habitat; and 2) investigate what might encourage landowners to engage in NEC habitat management on private forestlands (educational incentives, financial incentives, and/or conservation easements). We conducted a mail survey of landowners with at least 10 acres in the NEC focus area in Columbia, Dutchess, Putnam, and Westchester Counties, NY that explored the objectives of the study. The overall response rate was 34%.

REASONS TO OWN WOODED PROPERTY

Three factors (woodland retreat, utilitarian, and investment) explain why people own their woodland property in the study area. Most respondents identified having a "woodland retreat" as a very important motivation for owning their wooded land (Figure 1). Investment and utilitarian purposes are weaker motivators for woodland ownership in the study area.

⁺For more information see: youngforest.org, NewEnglandCottontail.org, timberdoodle.org

Figure 1. Landowner motivations* for owning woodland



*Woodland retreat includes: enjoying scenery, privacy, protecting nature, wildlife habitat, and bird watching. Investment includes selling land in the future. Utilitarian includes: passing on to heirs, hunting or fishing, farming, production of timber products for family or for sale, and non-timber forest products.

**Agreement was measured on a 5-point scale (1 = strongly disagree to 5 = strongly agree)

HABITAT MANAGEMENT PRACTICES

Allowing Old Fields to Grow into Young Forest

Eighty-five percent of respondents own at least one acre of grassland. "Allowing old fields to grow into young forest" refers to allowing fields to grow into brush or allowing brush to remain. It involves retiring an old field for a period of roughly 20 years, and may include scattered planting of shrubs. Most grassland owners (64%) have not done this as a habitat management practice but about 34% are likely or very likely to do it in the future. To encourage landowners to allow old fields to grow into young forest, the most powerful incentives, based on the percent response of "definitely would encourage" or "likely to encourage" are: expert advice from a professional (47%), and allowing NYDEC (New York Department of Environmental Conservation or partners to perform work on your land at no cost. Overall, financial incentives are less likely to encourage landowners to grow old fields into forest (Table 1).

Cutting Trees

Ninety-one percent of respondents reported owning at least one acre of wooded land. "Cutting trees" involves removing trees with the intention of forest betterment or

benefit to wildlife, typically focused on increasing understory growth. It could also involve clearing 3-5 acre patches of forest to allow trees to grow back. Most woodland landowners (75%) have not cut trees as a habitat management practice but about half (48%) are likely or very likely to do it in the future. The most powerful incentives for woodland landowners to cut trees, based on the percent response of “definitely would encourage” or “likely to encourage” is paying the landowner \$1000/acre (56%), and expert advice from a professional (48%) (Table 1).

Table 1. Likelihood of incentives to encourage landowners to perform habitat management practices

Incentives	Habitat Management Practice	
	Allowing old fields to grow to young forest	Cutting trees
	% “definitely would encourage*”/“likely to encourage”	
<i>Education and outreach incentives</i>		
Expert advice from a wildlife biologist or other professional	47%	48%
NYDEC or partners perform work on your land at no cost to you	42%	40%
Educational workshop about allowing fields to grow into forest or cutting trees	38%	40%
A demonstration area showing the practice on private land	38%	36%
A demonstration area showing the practice on public land	37%	36%
Technical assistance in writing a wildlife management plan	36%	39%
A peer program where you would learn from other landowners	32%	32%
NewEnglandcottontail.org website or other online resources	30%	31%
<i>Financial incentives</i>		
Conservation easement	40%	38%
Financial incentive that pays landowner about \$100/acre for allowing old fields to grow or \$1000/acre for cutting trees	33%	56%
Rental rate based on agricultural potential of the land	32%	NA
Financial incentive that pays landowner about \$75/acre for allowing old fields to grow or \$750/acre for cutting trees	21%	38%
Financial incentive that pays landowner about \$50/acre for allowing old fields to grow or \$500/acres for cutting trees	17%	32%

*Encouragement was measured on a 5-point Likert-type scale: “makes no difference,” “might encourage,” “neutral,” “likely to encourage,” and “definitely would encourage”

CONCLUSIONS

Landowners in the study area value that land as a woodland retreat over investment or utilitarian motivations (Figure 1). Educational and outreach incentives, in general, are more likely than financial incentives to encourage landowners to allow old fields to grow into forest. This result highlights the importance of wildlife professionals, such as those in NYSDEC, in encouraging landowner behaviors. However, a financial incentive of \$1000/acre is most likely to encourage landowners to cut trees for habitat management. An incentive package that combines expert advice, NYSDEC working on private land, and technical assistance may be most likely to encourage landowners to adopt habitat management practices for NEC. A successful habitat management incentive program should appeal to the specific motivations of private landowners. In the Eastern Hudson Valley, landowners are motivated primarily by

nature and aesthetic values. Based on this understanding of landowners’ values, natural resource professionals can work together and with conservation organizations to help ensure that an incentive program addresses those wants and needs.

REFERENCES

- ¹Widmann, R. H. 2012. New York’s forest resources 2011. U.S. Department of Agriculture, Forest Service, Northern Research Station, Newtown Square, Pennsylvania, USA.
- ²Gobster, P.H. 2001. Human dimensions of early successional landscapes in the Eastern United States. *Wildlife Society Bulletin* 29:2 (474-472).
- ³Fink, A. D., F. R. Thompson III, and A. A. Tutor. 2006. Songbird use of regenerating forest, glade, and edge habitat types. *Journal of Wildlife Management* 70 (180-88).
- ⁴Rodewald, A., and A. C. Vitz. 2005. Edge- and area-sensitivity of shrubland birds. *Journal of Wildlife Management* 69 (681-688).