

# The Forestry *Source*

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## Ornithologist: “It’s Not Just about the Young Forest Anymore” *Foresters’ Fund Grant Helps NJ SAF with Habitat Workshop*

By Steve Kalleser, CF

Thanks in part to an SAF Foresters’ Fund grant, a group of wildlife biologists and foresters recently attended a workshop led by professor Jeff Larkin of Indiana University of Pennsylvania, who discussed the cooperative management of young forests for imperiled species. Larkin, who has degrees in wildlife biology and forestry, has conducted research on the golden-winged warbler (GWWA) since 1993. GWWA populations in some areas of the Appalachians have declined by 70 percent to 80 percent over the last 40 years, and a petition has been submitted to list this species under the federal Endangered Species Act. Larkin’s work on various bird species has been assembled (along with the work of other ornithologists and foresters) into habitat management guidelines and best management practices (BMPs) to turn this important research into recommendations that can be implemented by private and public land managers. Larkin is a coauthor of *Golden-winged Warbler Habitat: Best Management Practices for Forestlands in Maryland and Pennsylvania*, published in 2011 by the American Bird Conservancy ([www.abcbirds.org/abcprograms/domestic/pdf/gwwa\\_bmp\\_final.pdf](http://www.abcbirds.org/abcprograms/domestic/pdf/gwwa_bmp_final.pdf)).

Larkin’s travel was covered by the Foresters’ Fund grant, which was obtained by the New Jersey Division of the Allegheny SAF. The workshop was organized by the New Jersey Chapter of The Wildlife Society.

A substantial amount of Larkin’s presentation focused on new results obtained since the publication of the GWWA BMPs. This latest research has been obtained by using radio telemetry to track GWWA movement. These data show that the GWWA does not necessarily spend the entire nesting season within early-successional habitat, but may venture up to one mile from its territory into surrounding older forest. In fact, recent research in Minnesota revealed that, shortly after fledging, the male and female birds divide the offspring between them and separately venture up to one-quarter of a mile into the surrounding older forest.

Recent research also has revealed that certain tree and shrub species appear to be indicators of GWWA territories, including white



A publication of the American Bird Conservancy ([www.abcbirds.org](http://www.abcbirds.org)), coauthored by professor Jeff Larkin of Indiana University of Pennsylvania.

oak, pin cherry, black locust, and blackberry. However, certain species appear to be negatively correlated to GWWA territories, including black birch, sassafras, mountain laurel, various blueberries, autumn-olive, and honeysuckle. The mechanism for this appears to be the presence or abundance of the caterpillars, other insects, and spiders on which the GWWA prefers to feed. Larkin recommended various hawthorns, silky dogwood, gray dogwood, and arrowwood viburnum as excellent shrub species for creating GWWA habitat, because of the relatively high caterpillar abundances these species typically host.

Based on this new research and past experience, Larkin suggested that foresters and wildlife biologists cease thinking of the GWWA as an early-successional species. He suggested describing the species as a “diverse forest obligate” or a “dynamic forest specialist.” This reflects a new view of the GWWA’s reliance on older forests within one mile of the young forests needed for breeding and fledging. It would also help differentiate landscapes for the GWWA from that used by the blue-winged warbler, a bird he characterized as historically occupying prairie fringe and barrens habitat. (In addition to the loss of young forests, hybridization with the blue-winged warbler is a major factor in the decline of the GWWA.)

Larkin strongly recommended forestry practices that encourage both oak regeneration and habitat maintenance for the GWWA and other imperiled bird species, such as the cerulean warbler. Aggressive forest stand improvement or the first cut of a shelterwood harvest (along with competing understory vegetation control) could promote cerulean warbler habitat, improve post-fledging GWWA habitat, and provide quality advance regeneration for future harvests that could be used by the GWWA as older breeding areas mature. In short, Larkin’s message is that responsible oak silviculture provides a continuum of habitats for imperiled species.

Additional resources include regional GWWA breeding habitat guidelines and other information from the Golden-winged Warbler Working Group ([www.gwwa.org](http://www.gwwa.org)) and management guidelines for cerulean warblers from the Appalachian Mountains Joint Venture ([amjv.org](http://amjv.org)).

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