Planning for Grassland Birds

Grassland birds have declined at a faster rate than any other group of birds over the past forty years. Many of these ground-nesting birds can still be found in the agricultural communities at the base of the Blue Mountain-Kittatinny Ridge. There are a number of steps that county and municipal planners, as well as private landowners, can take to maintain these unique bird populations. Many of these steps complement local efforts to preserve agricultural lands, improve water quality and protect scenic vistas.

What has caused the dramatic declines in grassland bird populations?
A combination of factors are to blame; chief among them are the conversion of agricultural land to residential and commercial uses, and the intensification of agricultural practices, especially an increase in the number of times a hayfield is mowed each year.

Wasn’t Pennsylvania covered in forests before colonization? Were there any grassland birds here back then?
Pennsylvania was predominantly forested before European settlement, but there were grasslands interspersed with the woodlands, created mostly by fires that opened up breaks in the forest. With the spread of agriculture in Pennsylvania, grassland birds greatly expanded their presence. These species are now almost completely dependent on agricultural lands since modern forest fire control no longer naturally creates grassland openings.

How much land is needed for grassland birds to nest?
Depending on the amount of open (non-forested, non-developed) space in the surrounding area, the amount of land needed for grassland birds on any one property may vary greatly. In areas where the majority of land is open, properties of 25 to 40 acres may be sufficient for some species. In areas that are significantly more wooded, patches of 100 acres or more may be needed to attract grassland birds.
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What can county and municipal planners do to help?
The first step is to find out where grassland birds are found in your region. Local birders are often the best source for this information; contact your local Audubon chapter or bird club to find birders in your area (see resources on left). Pennsylvania’s Breeding Bird Atlas can also help identify regions of interest. Look at the known grassland bird sites in the context of current land use and zoning. Often grassland bird priority areas will overlap with critical areas for agricultural preservation. Ideally, grassland bird sites should be included in agricultural or conservation zoning districts. Consider establishing or expanding an Agricultural Security Area to include key sites for grassland birds. Coordinate with your local land trust or conservation district on efforts to permanently protect farmland through county agricultural preservation programs or other methods.

In addition to directly losing habitat, grassland birds are susceptible to something else that accompanies residential and commercial development: traffic noise. Studies have shown that Bobolinks and Eastern Meadowlarks (right) - two species that nest in Pennsylvania - will not nest near busy roads. The area of avoidance is 400 meters from a road that hosts more than 8,000 vehicles/day, and the distance increases to 1200 meters from a major highway. It was found that the noise created by traffic caused birds to avoid areas close by – not the sight of cars or avoidance of the road itself.

State, county and local governments should account for this behavioral response of grassland birds to noise by ensuring that their infrastructure plans – including municipal Official Maps – do not call for placement of new roads or expansion of existing roads in critical grassland bird areas.

What can private landowners do to help?
The most important step that can be taken to help grassland nesting birds is to delay the mowing of hayfields until at least July 15th, preferably August 1st, in as many areas as possible, especially areas where you know birds are nesting.

When cutting during nesting season must occur, you can do the following to reduce impacts on nesting birds: leave at least 45 days in between cuttings, leave at least 6 inches of grass after the cut, leave adjacent fields uncut to allow birds to escape to cover, add a flushing bar to the front of the tractor.

U.S. Department of Agriculture programs can provide both technical and financial assistance to landowners interested in using their properties for grassland bird conservation. For example, marginal cropland can be converted to wildlife uses, or buffer strips added to provide wildlife cover and improve water quality. Contact your local Natural Resources Conservation Service or Farm Service Agency office (contact information on left) for more details on the types of programs that are available in your area.