

Managing Open Space for Wildlife Species

Adapted from the PA Game Commission's "Mowing for Wildlife"

Many property owners want clean-cut, attractive lawns or fields. However, what appears to be a healthy lawn to property owners isn't necessarily the best option for wildlife. In fact, continual mowing can reduce or remove valuable habitat and discourage many wildlife species from visiting a landowner's property. Properly used, however, mowing can be a useful habitat management tool.



Key Facts for Wildlife-Friendly Mowing

Realistic goals must be considered for any habitat management practice, including mowing. If you are targeting a particular species, the species must occur – or potentially occur – at the desired location, based on its habitat requirements, life cycle, and distribution. After determining that a target species may occur on your property, several considerations should be kept in mind when deciding if you should mow and at what time you should apply this habitat management practice. For instance, mowing during spring and summer months may reduce or even kill nesting and young animals, such as eastern meadowlarks, bobwhite quail, ring-necked pheasants, rabbits and deer. The uncut areas protect young animals from predators and provide seasonal forage and thermal cover.

Weeds can be described as unwanted or undesirable vegetation. Mowing to control “weeds” also may not be beneficial for some wildlife. Although controlling problem plants such as thistles and *Ailanthus* is important, many “weeds,” including nettles, foxtail and ragweed, are palatable to wildlife or attract insects needed to meet the diet requirements of many bird species. The trick is providing a balance between volunteer forbs (weeds) and other desirable plants.

Pennsylvania's native grasses grow in clumps. This growth habit provides excellent year-round cover and forage for wildlife, while retaining enough bare ground areas for animals to move through the field in search of food. Still, to maintain the existence of a native grass field, occasional disturbance from mowing, burning, spraying, or disking is needed. Without mowing or other disturbances, succession will take place, and the grassland will be replaced by woody vegetation. Subsequently, wildlife requiring grassland or meadow habitat will be replaced by more common woodland wildlife.

Common Wildlife Nesting Periods:

White-tailed deer - May 15th to July 15th

Eastern cottontail rabbits - February 1st to September 30th

Wild turkeys - April 15th to July 31st

Bobwhite quail - April 15th to July 31st

Ring-necked pheasant - April 15th to June 30th

Grassland songbirds: - Average (June 1st to August 15th)

- **Eastern meadowlark** - May 15th to July 31st

- **Grasshopper sparrow** - June 1st to August 15th

- **Field sparrow** - May 15th to August 15th



Mowing Considerations: When to mow

To maximize wildlife benefits and reduce wildlife mortality, mowing should be done outside of the nesting and brood-rearing season, which generally occurs from April to August. Late summer and late winter are the best times to mow for wildlife. Old field areas experiencing woody encroachment should be mowed during late winter (February or early March) or early fall (September) to maintain

food and cover for wildlife. The key, as with grasses, is to avoid mowing during the prime nesting and brood-rearing periods.

Moving Considerations: Reasons for mowing/not mowing

Reasons to mow:

- To maintain or enhance wildlife habitat.
- To maintain grasslands and meadows.
- To suppress the growth of noxious weed species such as Canada thistle and multiflora rose.
- To prepare land for other land management practices, such as applying herbicides, prescribed burning, and seeding.
- If local zoning ordinances require a specific lawn length and the management of “weeds.”

Reasons not to mow:

- Mowing is expensive. Fuel costs are high, and equipment must be repaired and maintained.
- Continuous mowing has little value for wildlife. Areas not mowed frequently provide excellent habitat for wildlife to nest, raise young, and forage.
- Grasses with shallow roots cannot uptake nutrients or prevent erosion as well as grasses that are deeply rooted.
- Mowing takes time.
- Mowing adds pollutants to the air.
- Frequent mowing creates thatch buildup, resulting in undesirable groundcover conditions.

Mowing Considerations: Where to mow

Yards or Lawns (less than 1 acre)

Maintaining grass at a height of at least three inches and setting aside other areas of the yard for wildlife-friendly plantings (e.g. black-eyed Susan, red clover, alders, viburnums, dogwoods, etc.) will enhance wildlife habitat and wildlife feeding areas. However, some urban and suburban jurisdictions restrict lawn length and the presence of “weeds.” You should check with your local zoning board and adhere to mowing requirements if they exist or propose changing them to benefit wildlife.

Fallow Fields, Grasslands, and Maintaining Existing Cover

To keep valuable grasses from being overtaken by competition, mow one-third of a field once a year in succession, rotating sections of the opening so each is mowed every third year. Mow one strip the first year, a different strip the next year, and the last untouched strip the next year. This will create diverse vegetation stands with differing age structures, which will provide food and cover for many wildlife species. It will also keep woody stems small enough to be mowed. When possible, grasses should be baled to remove thatch from the field and prevent buildup at ground level. Mowing should be performed outside of wildlife nesting periods (mid-August). This allows nesting wildlife such as cottontails and quail to mature during the spring and summer with minimal disturbance. Mowing height is also critical. Native grasses should not be cut below 10 inches. Cutting these grasses too low may damage or kill them, because the grasses store much of their energy at their bases. Also, cutting at a minimum height of 10 inches, provides some wildlife cover until regrowth of the plant canopy can occur.

Roadsides, Ditches, and Field Edges

These areas provide important nesting and foraging areas for birds, small mammals, deer and insects. Wildlife habitat can be enhanced along roadsides by reduced mowing, delayed mowing, planting native grasses, and mowing at a higher height. Contrary to popular belief, mowing more than 10 feet along roadsides does not significantly reduce mortality of wildlife on roads.

Mowing should be limited along roadsides, ditches, and field edges. By limiting how often designated areas are mowed, you allow vegetation to attain optimal height for wildlife habitat. Mowing once every

two or three years at a minimum height of 8-12 inches will prevent woody growth from taking over an area. Mowing along roadsides should occur in late summer (August 1-31) to allow most nesting birds and small mammals to successfully rear their young. Countless nests and young are destroyed with mowing earlier in the year, and most equipment operators are unaware of the high number of nests that are destroyed while they are mowing.

Mowing Considerations: Alternatives to Mowing

For controlling noxious weeds and woody plant invasion on grass stands, the preferred alternative to mowing is spot spraying with selective herbicides. Controlling invasive plants in grass stands is more economical and effective if outbreaks are treated at first detection.

Another alternative to mowing is strip or rotational disking. Disking is a simple, effective, and inexpensive wildlife habitat management tool. In strip disking, a disk or harrow is used to create ground disturbance and set back natural succession by breaking up grassy vegetation. Disking opens up grass stands, reduces thick mats of grass, stimulates germination of seed-producing plants, and increases insect populations as a wildlife food source.

Controlled burning also should be considered as an alternative to mowing, especially when managing many larger fields. Controlled fire sets back natural succession and stimulates growth of valuable grasses and legumes, by releasing nutrients. Controlled burning is less expensive and time consuming than mowing and produces many wildlife and forage benefits. However, controlled burning requires careful planning and controlled conditions to be an effective management tool.