Smithsonian
National Zoological Park
Conservation Biology Institute

Field Management Risk Calendar for Grassland Birds

Updated: April 2021

Bobolink

Green Zone
Management season: optimal time for field management, especially if field is only managed once per year.

Red Zone Peak Breeding season: includes peak nesting period for many grassland species resulting of >90% mortality of nestlings if mowed during this time.

Yellow Zone
Conservation season: includes early season growth of vegetation for breeding birds and maintenance of vegetation structure for overwintering birds.

Eastern Meadowlark

Illustrations by Olivia Cosby

Dark Orange Zone
Extended Breeding season: includes timeframe for early- (e.g. Eastern Meadowlarks) or late-season nesters (e.g. American Goldfinches).

Light Orange Zone
Active season: includes timeframe when birds are using fields as stopover sites and fueling up for migration.

***Late season hay can be used for** bedding hay, fodder for mature livestock, or mulch. Some benefits of late-season hay harvesting include the protection of fledglings and nesting site habitat for rare grassland bird species and shorter hay drying times.

What species can we expect in Virginia's grasslands, and when?

Habitat associations based off of data collected from Virginia Working Landscapes' annual grassland bird surveys

Species	Present in VA	Habitat Association
American Kestrel	Year-round	Open grassland habitats including meadows, pastures and hayfields
Bobolink	Spring/Summer	Large grasslands dominated by sparse cool-season grasses intermixed with broad-leafed forbs
Common Yellowthroat	Spring/Summer	Thick, broad-leafed vegetation including wildflower meadows, wetlands and fallow fields
Dickcissel	Spring/Summer	Large grasslands with dense cover, tall vegetation, and many (>10/ha) elevated song perches
Eastern Bluebird Eastern Kingbird	Year-round	Wide range of grasslands but requires cavities for nesting and multiple perches
Eastern Meadowlark	Spring/Summer	Wide range of grassland habitats with mature trees nearby for nesting
Field Sparrow	Year-round	Large, expansive cool-season pastures and hayfields with sparse vegetation
	Year-round	Both warm and cool-season meadows containing ample forbs and shrubs
Grasshopper Sparrow	Spring/Summer	Large, expansive cool-season pastures and hayfields with short vegetation
Indigo Bunting	Spring/Summer	Both warm and cool-season meadows with ample forbs and shrubs, large or small fields
Loggerhead Shrike	Year-round	Large contiguous grasslands (pastures) with scattered shrubs for perching and impaling prey
Northern Bobwhite Quail	Year-round	Requires mixture of habitat types including meadows with ample edge habitat for cover and bare ground
Northern Harrier	Year-round	Expansive grassland habitat with sparse/short grasses for hunting and patches of tall/dense grasses for roosting
Red-winged Blackbird	Year-round	Wide range of grassland habitats, higher densities in wet areas with patches of thick vegetation
Short-eared Owl	Winter	Expansive grassland habitat with sparse/short grasses for hunting and patches of tall/dense grasses for roosting