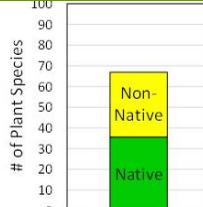
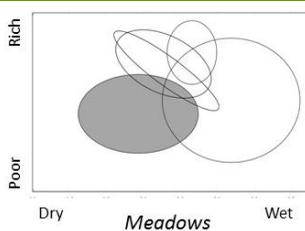


Dry Meadow

DRAFT 10/30



Open Upland: Dry Meadow



A dry meadow is an open upland habitat found on thin, infertile soil around rocky summits; on road banks and railroad embankments; in utility corridors; in old fields; and even in active agricultural situations, such as pastures, and less commonly, in hayfields. The vegetation is dominated by herbaceous (non-woody) plants and consists mostly of forbs and grasses tolerant of dry, nutrient-poor conditions.

How to Recognize It

Dry meadows feel more delicate than old fields, wet meadows, or pasture/hayfields: the grasses are wisper and sparser, patches of bare soil (sometimes formed by ant nests) are more likely. Even the base color tends to be a more nuanced green because of its frequent mixing with the browns of dry grass. In late summer, tufts of grasses, including the native warm-season grass Little Bluestem, often alternate with lower vegetation, creating a scruffy appearance. The unevenness is further augmented by the topography. These meadows are often found on slopes or hilltops, and, given the thinness of the soil and a history of agricultural use, are regularly spotted with rock outcrops.

The dynamics of seasonal coloration can also be distinctive. Dry Meadow plants are generally slower to green up in the spring and faster to dry out in the autumn compared to those of the moister and more fertile European pastures and hayfields. Because these meadows are usually not intensively managed (i.e., frequently cut or grazed), their color palette tends to be more profuse in mid summer, including not just the various purples, blues, whites, and yellows of wild flowers. A diversity of butterflies come to nectar and, in some cases, lay their eggs. By late-summer or autumn, these meadows are often dominated by the tans or auburns of grasses which have been allowed to go to seed rather than being kept low and green by mowing or grazing.

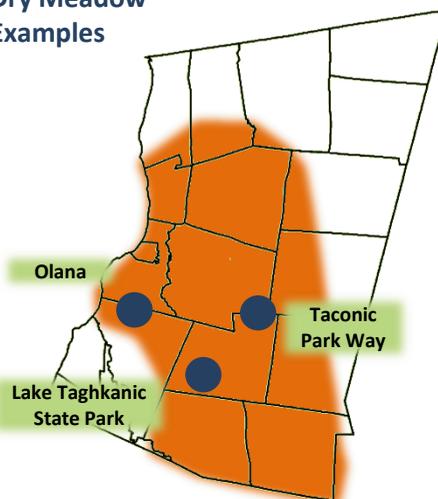
Location

Large dry meadows are mostly found in a broad belt extending from the south-eastern corner up to the north-western corner of Columbia County. However small patches around rocky summits or along railroads or utility corridors can also be observed outside of that area.



A natural dry meadow near the summit of Mt. Alander just across the border in Berkshire County.

Dry Meadow Examples



Visiting

Dry meadows are most beautiful to look at from a distance in late summer/fall, when the Little Bluestem grass turns its characteristic auburn hue. However, if you are interested in butterflies, visit these meadows in late May for a glimpse of the rare Indian and Cob-web, Skippers, or in late August for Leonard's Skipper.

What to Look For

Plants: The native warm-season grass Little Bluestem occurs at least in small numbers in almost all dry meadows we studied. Sometimes it can be the dominant plant. Look for its auburn tufts and wind-dispersed seeds in late summer. It is usually accompanied by the invasive Spotted Knapweed which produces a profusion of purple, aster-like flowers in mid summer. Aside from some ubiquitous European meadow plants, and, to a lesser extent, European cold season grasses, the most notable plants are the native Dewberry, which can cover the ground with its thorny runners and cause you to trip, and the Wild Strawberry, both offering edible fruits in early to mid summer. At that time, dry meadows can also be awash with the small yellow and/or orange flower heads of non-native hawkweed species, bobbing about on long, leafless stalks. In late summer, Early Goldenrod announces the coming of fall with its yellow flowers. In contrast to the more common old field goldenrods, the Early Goldenrod does not form dense stands. Its plants are spread out across the dry meadow, each displaying a basal rosette of leaves and a long flowering stalk topped by the yellow inflorescence. It might be joined its close relatives, Gray Goldenrod and Silverrod, and some uncommon native grasses, such as Slim-leaf Witchgrass and Tiny Love-grass. We found a variety of rare plants dry meadows, including several orchid and native legume species (see table on Rare Species).



The fine filigree of a Little Bluestem seed head..

Insects: Butterflies come to dry meadows seeking nectar for themselves and food plants for their caterpillars. While the nectar-seekers are often fairly common, widespread species, such as Cabbage Whites, Sulphurs and Pearl Crescents, there are several rarer butterflies who are associated with these habitats because their caterpillars feed on native grasses. Unfortunately, they are all relatively inconspicuous and short-lived. Cobweb Skippers fly in mid May and Indian Skippers in late May and early June. The somewhat larger and more brightly-

Characteristic Plants

The following species are common in this habitat, but not necessarily unique to it. Those with an asterisk () are good indicator species; non-native species are printed in purple, invasives in bold.*

Common Bedstraw
 Dewberry*
 Wild Carrot
 Common St. John's-wort*
 Early Goldenrod*
 Palmate Hop-clover*
 Yarrow*
Spotted Knapweed*
 Little Bluestem*
 Rough-leaved Goldenrod
 Wild Strawberry

colored Leonard's Skipper flies in late August and early September. While all three of these species tend to be associated with dry pastures containing Little Bluestem, the caterpillars of only the first species seem to obligately feed upon it. For the other species, Little Bluestem may, instead, be a conspicuous flag for a suite of grasses they utilize.

These are also the favored stomping grounds of ants, typifying their preference for dry, open habitats. The ant fauna of these meadows includes *Formica prociliata*, an ant previously unknown from farther east than Ohio. Look for their extensive but relatively flat nests. We found it at more than 40% of our dry meadow sites. It is



A Leonard's Skipper nectars on a late-summer thistle.

More ‘What to Look For’

unclear why this species should be particularly common here, although Kyle Bradford, who has worked with us on the ants, suggested that it might be related to the County’s long agricultural history and somewhat hilly terrain which has resulted in an especial abundance of the dry meadows these ants favor. The Alleghany Mound Ant (*F. exsectoides*) is also particularly common in these fields. Its mounds are more dramatic affairs, being a yard or more in diameter and perhaps a couple of feet high. Both species illustrate the complexities of ant societies: they are social parasites, meaning that they will raid the nests of select other ant species carry off eggs and larvae, and then raise those to be workers in their own nests.

Reptiles & Amphibians: Given their dryness, these meadows are not frequented by most amphibians although, no doubt, some frogs, toads, and salamanders will pass through seeking moister ground or in search of food on cooler days. Snakes may come to these areas to bask and hunt (although the relative lack of amphibians and small mammals might reduce the temptation). On stony hills, snakes who den in the rocks may seek patches of dry meadow for basking.

Mammals: Deer sign is common in such fields, and other mammals surely include patches of Dry Meadow in their home range. However, the thatch (i.e., carpet of low vegetation) of these of these meadows is usually less than that of old fields, hay meadows, and wet meadows because vegetation density overall is lower. This means less habitat for certain small mammals. It is likely, however, that, at night, White-footed Mice scurry across the ground seeking seeds.

Birds: We have seen Bobolinks around some of our more extensive Little Bluestem Meadows, although the grass might be a bit sparse for their tastes, Vesper Sparrows and Grasshopper Sparrows might find it more to their liking, but, although these birds have been recorded in the County, are observations are too sparse to be definitive. When some brush is present, Savannah and Field Sparrows, and some typical shrubland species such as Yellow Warbler, may appear. Hawks will course over in search of prey, and we have seen Kestrels and Red-tails around these lands.



Wand Bush Clover (*Lespedeza violacea*)

Rare Species

Plants

- Slender Knotweed (*NYS Rare*)
- Small-flowered Agrimony (*NYS Rare*)
- Slender Lady’s Tresses (*Regionally Rare*)
- Showy Goldenrod (*Regionally Rare*)
- Yellow Stargrass (*Regionally Scarce*)
- Ragged Fringed Orchid (*Regionally Scarce*)
- Whorled Milkweed (*Regionally Scarce*)
- Common Juniper (*Locally Rare*)
- Late Purple Aster (*Locally Rare*)
- Forked Blue-curls (*Locally Rare*)
- Spiked Lobelia (*Locally Rare*)
- Wood Betony (*Locally Rare*)
- Small Sundrops (*Locally Rare*)
- Wand Bush Clover (*Locally Rare*)
- Round-headed Bush Clover (*Locally Rare*)
- Narrow-leaved Tick Trefoil (*Locally Rare*)

Animals

- Formica prociliata* (an ant; *Regionally Rare*)
- Cobweb Skipper (*Regionally Rare*)
- Indian Skipper (*Locally Rare*)
- Leonard’s Skipper (*Regionally Rare*)

Similar Habitats

Lightly managed dry meadows can be similar to old fields, but tend to have sparser and more heterogeneous vegetation. If Little Bluestem is present in a meadow, that is a very good indication that it is indeed a dry meadow.

Grazed or hayed dry meadows can be very similar to degraded European pastures or hayfields, especially when the Little Bluestem and other native grasses are kept so short that they are difficult to distinguish from European grasses. Indeed, the transition between these habitats is gradual and many dry meadows we find in the landscape today might well have resulted from overuse of former European pastures or hayfields. If there are plenty of rock outcrops in a pasture, chances are that it is a dry meadow.