

The Delightful Diversity of Butterflies at Crex Meadows

by Ann Swengel

Crex Meadows is located in an exciting crossroads of north and south, and east and west, as well as grassland, wetlands, and uplands. Not pristine wilderness, this area has a history of ditching, draining, and plowing followed by decades of habitat restoration at Crex Meadows. Surrounding lands are in timber management as county forest. While we can't know that all the butterflies formerly living here a century or so ago still do (because information from back then is sketchy), an awful lot of butterflies are here now. This endorses the idea of conserving large landscapes with a diversity of habitat types and land uses.

Looking for butterflies in northern Wisconsin is particularly dicey. It's a rare season when my co-researcher Scott Swengel and I have a comfortable time getting all our field work completed at the right timing at all the sites we want to check for butterflies. Many a time a perfect weather forecast from just the night before completely misportrays the dismal weather that actually happens. It helps to have some backup plans: if the weather is poor in the spot you plan to visit, you may be able to drive a few hours to a different site where the weather may be tenable. On the other hand, perfectly fine butterfly weather sometimes occurs on days with dismal forecasts—all just to keep us gambling about what might happen next! My co-researcher Scott Swengel and I appreciate your understanding that on our field days, we are very busy completing formal butterfly monitoring surveys. If you see us, we greatly appreciate your understanding that we need to continue our surveys uninterrupted, as we never have enough time when the weather and timing are right!

About the author

An enthusiast of butterflies since childhood, I became serious about them in the mid-1980s, with the encouragement of ornithologist Scott Swengel, whom I met then and married. Field partner in bird

and butterfly surveys ever since, we've studied prairie butterflies in seven states, as well as Wisconsin's barrens and bog butterflies. We've published a number of peer-reviewed scientific papers on butterfly detection, habitat associations, phenology and fluctuations, and responses to site management, as well as non-technical articles. A past vice president of the North American Butterfly Association and co-editor of the annual 4th of July Butterfly Count report, I am currently honored to serve on the editorial board of the *Journal of Insect Conservation*.

Acknowledgments

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Why look for butterflies here?

Crex Meadows offers great butterflying because it is a large conserved landscape of publicly accessible land with a variety of habitats and ownerships. If you have to pick between either the central or northwestern Wisconsin barrens for your visit, these are the tradeoffs. We find Frosted Elfin and Cobweb Skipper down there (see Jackson County online article) but not here, although Crex Meadows is in the documented range of the latter species (not the former, but I keep hoping!). However, we find Mottled Duskywing and Leadplant

Moth at Crex Meadows, the duskywing formerly but not recently in central Wisconsin, the moth never. Phlox Moth is usually easier for us to find at Crex Meadows too, and Purplish Copper and Western Tailed-Blues are other bonuses. Furthermore, the most complete bog butterfly fauna in the state is just one county north of Crex Meadows in Douglas County (see Northwestern Wisconsin online bog article).

Crex Meadows Sites

Traversing the drier habitats here is relatively easy if the vegetation is primarily grassy, but more challenging in brushy and/or steep areas. Beware poison ivy. Flowages and wetlands can have rougher footing, with uneven terrain on the edges, and muck and hummocks once in them. There's not much annoyance from mosquitoes and chiggers, but the biting flies in summer can bring me to the brink of tears. Beware also the abundant ticks! They come in two versions: small (wood ticks) and smaller (deer ticks). The latter have high infection rates of Lyme disease, and both kinds offer other tick-borne illnesses too. The size and color of a skin mole, ticks gradually (and utterly painlessly) bite into your skin to suck blood, especially by lurking in parts of your body you don't even know you have. If you do not arrive well apprised on how to cope with ticks, be sure to consult the DNR ranger station in Grantsburg. Bright sunny heat in mid-May can resemble a desert summer day, or it may frost in late June. Dangerous thunderstorms, including tornadoes, are a distinct possibility. Remember that a vehicle furnishes shelter from lightning but danger during a tornado. For the latter, seek a basement or interior of a reinforced building.

These butterfly accounts derive from the recreational visits and butterfly surveys my husband Scott Swengel and I have conducted in Burnett County between April 26 and September 20 since 1988. But we've made no visits between June 13 (our

last spring visit) and July 13 (our first summer visit). This is an important gap in butterfly coverage, plus our August-September visits are few. Our surveys, analyses, and papers have especially focused on barrens Lepidoptera, especially 'Karner' Melissa Blue and Phlox Moth. But in our research, we've tried to cover adequately the other barrens specialties of this area, and to visit adjacent wetlands. So the butterfly abundances and flight periods provided here are not idealized, but very much reflect what it's like when you can't be here every day and can't pick your weather in this place of wild climatic variation. But since this article is restricted to the times and locations of our visits, it does not reflect the species' overall abundance, or even all the noteworthy species present, in this county. There's lots of room for more learning. Crex Meadows is a large area, and although we've visited many additional spots not highlighted specifically in this article, we've sure not gone everywhere, and our coverage is particularly spotty in the southeastern part of this project area. Even the locations we've visited a lot have gaps in our coverage, plus many other sites have gotten way less attention than these, or none at all. The flight period information provided in each species account here is necessarily incomplete. But it's all collected by the same method by one research team (us) and accounts for abundance, so I hope it gives some idea of what's possible for one group to find.

Caution: Management here includes draining and flooding of impounded wetlands and broad-scale tree-cutting, brush-cutting, herbiciding of brush, mowing, and burning. The way a location looked during a past visit may be considerably different the next time. Burning occurs primarily in spring and fall, so if you visit after the plants have regrown, it may not appear to be a dramatic change. The grass may be greener and taller and more flowers may be blooming, especially wild lupine and leadplant. While wide-ranging and immigrant butterflies like the Monarch may not show much effect, or in fact may be drawn in by the flowers, the more localized butterfly species recolonize more slowly.

The following are spots in Crex Meadows that are easily accessible and interesting for butterflies. The target species mentioned below have occurred on our surveys in more of these spots than indicated here. I'm listing the top spots for each species.

1. Phantom Prairie: This lovely patch of prairie is on the east side of Phantom Lake Road between Abel and Main Dike roads. It's a great spot for barrens specialties including 'Karner' Melissa Blue, Mottled Duskywing, Dusted Skipper, and Phlox Moth, as well as Western Tailed-Blue. Lower lying areas are notable for wetland associates, including Purplish Copper.

2. Phantom Lake: Wetland habitat fronts on the east side of Phantom Lake Road south of Abel Road. You can scan nectar flowers from the sure footing of the roadside, or take the plunge into the mucky, hummocky wetland.

3. Riegel Overlook: An observation area and parking lot lie east of West Refuge Road on the ridge about 1/4 mile south of North Refuge Road. Look for Mottled Duskywings in the northeast and northwest quadrants from this parking area, as well as hilltopping along the ridge east and west. The southwest quadrant has some extensive open grassy areas good for Dusted and Leonard's skipper, and the extensive lupine patches (mainly among the oak brush) are notable for Persius Duskywing. Check the leadplants for Leadplant Moth.

4. North Refuge Road (west): About 3/4 mile west of the overlook, a truck track intersects North Refuge Road. Southeast of this junction is a hill with diverse barrens flora that supports Gorgone Checkerspot and Mottled Duskywing, which has a great opportunity for hilltopping here.

5. Town Hall (Monson) Road: A truck track leads east to Monson Lake from Town Hall Road between North Refuge Road and Reed Lake Road. The area north and south of this track by Town Hall Road has diverse prairie flora suitable for Mottled Duskywing and Leadplant Moth.

6. North Refuge Road (east): About 1/2 to 3/4 mile east-northeast on North Refuge Road from the junction with East Refuge Road is an area of interesting barrens adjacent to wetland

potholes. This combination results in good prospects for Mottled Duskywing and Phlox Moth as well as wetland associates including Purplish Copper.

7. Monson Lake Access: A truck track leads south from Reed Lake Road to Monson Lake. This track is about halfway between Town Hall and North Refuge roads. Since extensive *Ceanothus* occurs in this area, this can be a good bet for Mottled Duskywing.

8. Reed Lake Road just east of North Refuge Road: On the south side of Reed Lake Road just east of North Refuge Road is an interesting area of prairie/ barrens flora where we've found Leadplant Moth.

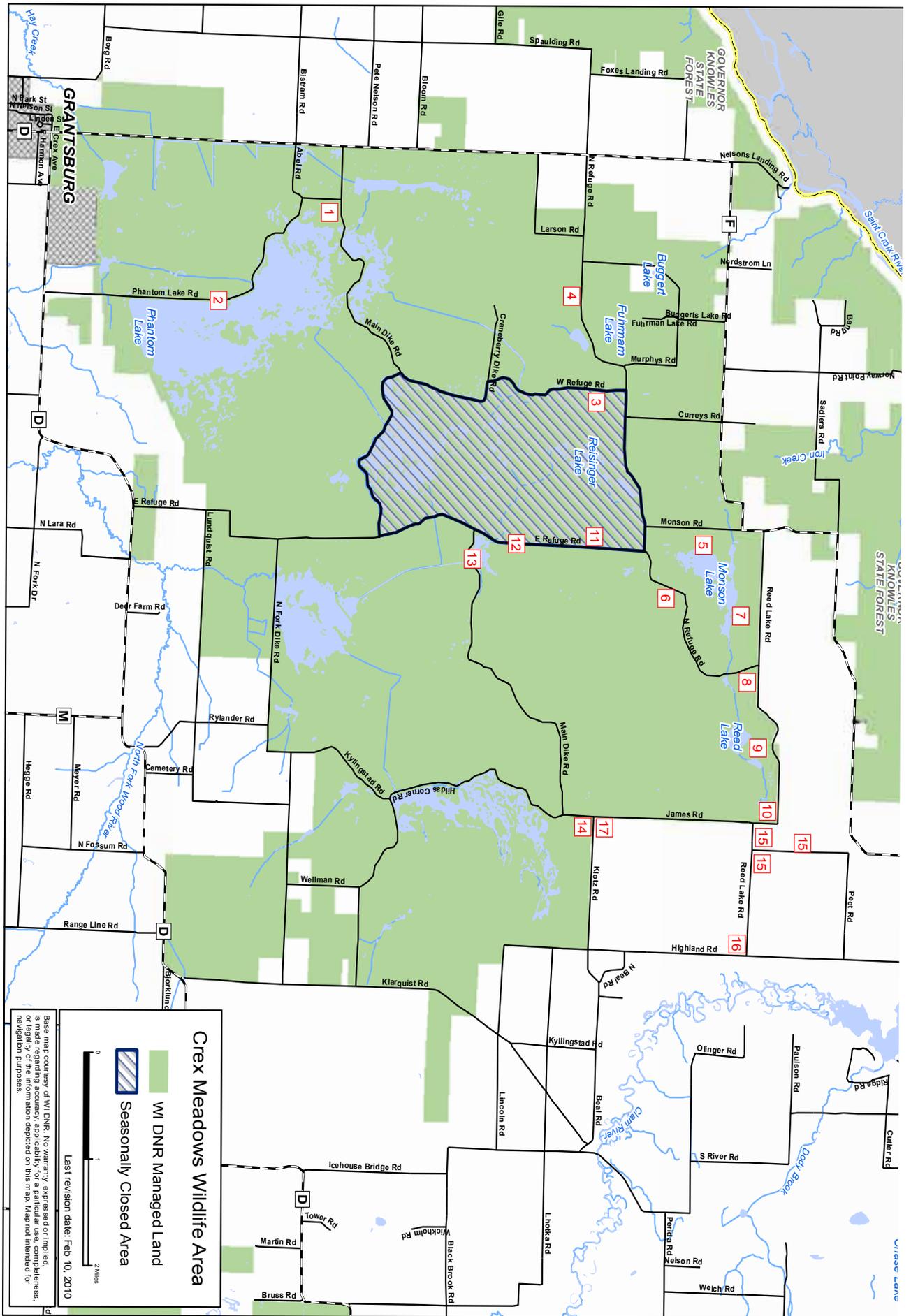
9. Reed Lake Access: A truck track leads south from Reed Lake Road about 1/2 mile east of North Refuge Road. Barrens predominate on the uplands around this access road (we've happened to focus our surveys east of the track) but south of the parking lot lies Reed Lake, with a bog on the north side of the lake. The ridge west and southwest of the parking area is a good spot for Mottled Duskywing—abundant *Ceanothus* on a hilltop! The strip of less brushy prairie fronting Reed Lake Road is a good spot for Phlox Moth.

10. Reed Corner: Continue east on Reed Lake Road from the Reed Lake access. In about a 1/2 mile, the road turns from going east to going south. At that corner, on the south and west of Reed Lake Road, is this very open, unbrushy, grassy prairie area supporting 'Karner' Melissa Blue, Gorgone Checkerspot, Mottled Duskywing, Leonard's and Dusted skippers, and Phlox Moth.

11. East Refuge Road: On East Refuge Road about 1/4 to 1/2 mile south of North Refuge Road, we've had good luck finding Phlox Moth, especially on the west side of the road in the strip of prairie flora in the right-of-way between the road and the wildlife crop plots.

12. Camp 8: A truck track leads east into this area from East Refuge Road just north of Dike #1 and Main Dike Road. Phlox Moth occurs in this area both east and west of East Refuge Road.

13. Pumphouse: Park in the pullout by the building at the boat launch for Dike #1 on the west end of Main Dike Road, east of East Refuge



The numbers on this map correspond to the numbers on locations described on pages 2 and 4 of this article.

Road. You can scan nectar flowers from the sure footing of the roadside, or take the plunge into the mucky, hummocky wetland.

14. Klotts Road South: This quadrant southeast of the junction of Klotts Road with James Road, with a barrens slope fronting on both roads, supports Persius and Mottled duskywings, and Dusted Skipper.

Burnett County Forest spots:

15. Peet Road: Peet Road goes north from Reed Lake Road about 1/4 mile east of James Road. In the northeast quadrant of this junction is the Peet firebreak. Especially along the roadside here can be good for Hoary Elfin. In the northwest quadrant is an open forest with a well developed heathy understory that is habitat for Henry's Elfin. About 1/2 mile north of this junction is the start of a dense lupine patch in the roadside on both sides of the road. This is a good area for Persius and Mottled duskywings, plus watch for Henry's Elfin. Both the firebreak and the roadside lupine patch are good for Western Tailed-Blue, 'Karner' Melissa Blue, Gorgone Checkerspot, and Leonard's and Dusted skippers; keep an eye out for Phlox Moth, too.

16. Reed Lake Road East: About 1/2 to 3/4 mile east of Peet Road, on the south side of Reed Lake Road, is open woodland and savanna with a dense heathy understory. Watch for Henry's Elfin, Western Tailed-Blue, and Mottled Duskywing.

17. Klotts Road North: Immediately east of James Road, the north side of Klotts Road has dense lupine in the grassy roadside right-of-way good for Western Tailed-Blue, Gorgone Checkerspot, Persius Duskywing, and Dusted Skipper. In the forest edge, look for Henry's Elfin.

Finding Olympia Marbles

Please see the Jackson County online article for details on this species. Here is information specific to Crex Meadows.

Timing, timing, timing: Our earliest and latest dates here are April 26 to June 8, and we've found Olympia on all visits through May 20. But we've not defined the true start of the flight period since we've not surveyed earlier

than that. As it happens, we've only visited Crex in April in warm, early springs (1988, 2006), so we also can't address how late the onset of the flight period can be in cool, slow springs. Meanwhile, we can comment a bit more on the end of the flight period. We've found none on two May visits: May 22, 1998 (also a warm early spring) and May 28 (2006). In only one year have we found Olympias in June (June 7-8, 2008, a cool slow spring), failing in five other years on visits on June 6-13. On the other hand, in 12 years, we've visited between May 20 and 27 and found Olympia.

Good spots: Olympia Marble occurs widely around this area. Noteworthy spots at Crex Meadows are Phantom Prairie, Reed Corner, Riegel Overlook (southwest quadrant), and Klotts Road South; at Burnett County Forest, Peet Road (both the firebreak and the roadside lupine patch) and Reed Lake Road East.

Other whites: Three whites with relatively long flight periods are possible. **Cabbage White** is a very common and widespread resident in Wisconsin, although not all that common in the barrens and wetlands of Crex; we've found it here from May 23 to August 17. Abundant overall in North America, **Checkered White** is a rarely encountered immigrant (or sporadic resident) in Wisconsin, with a much longer flight period than we've recorded here (July 21-26), based on a very few individuals. A species with northern affinity, **Mustard White** has turned up occasionally in our surveys here (June 8-July 26), again, a longer flight period than we've recorded is likely. While technically not whites, both **Clouded Sulphur** and **Orange Sulphur** have a leucistic (whitish) female form, which looks a lot like a white. We've recorded these sulphurs from May 12 to August 18 (Orange Sulphur) and September 20 (Clouded Sulphur), but they no doubt have longer flight periods than we've documented. The sulphur most tied to barrens (its caterpillar food plants are in the blueberry family), **Pink-edged Sulphur** doesn't have a white form. Although reported as single-brooded, it has a remarkably long flight period—May 22 to August 18 in our experience here. This length is consistent with the

span of May 2 to August 21 reported by Mogens Nielsen in *The Butterflies of Michigan*. However, extreme early and late dates are usually represented by one or two individuals. Main flight is very late May or early June to early/mid-August.

Finding Purplish Coppers

Widespread in western North America, Purplish Copper is a good find in Wisconsin. Assertive, dynamic, colorful—this copper is also elusive, both when flushed but also in finding reliable locations to see it in our state.

Location, location, location: Seemingly associated with wetlands or wetter areas here, Purplish Copper can also be found in adjacent upland areas, especially on or near nectar sources. Very rarely we've found a seemingly stray individual in an upland area farther afield from a wetland.

Timing, timing, timing: Our spring dates range from May 26 to June 8, and more numerous summer dates range from July 13 to August 9.

Other tips: Of all the places we visit in a year, Crex Meadows is by far our most reliable site for this species. But that's not all that reliable. We've only found Purplish Copper in six years here: 1988, 2001, and 2007-2009. Although we're far from developing any real patterns yet, it's curious that this seemingly wetland-associated butterfly was more detectable by us in droughty years (1988 and 2007-2009). On the other hand, if we were able to visit Crex Meadows more frequently, and focused more on vegetation types where we've found Purplish Coppers here, perhaps we'd get to enjoy this butterfly more often.

Good spots: Our best spots are the Pumphouse (wetland and flowage), Phantom Prairie, North Refuge Road, and Phantom Lake.

Other coppers: As long as you realize you need to pay close attention to that active butterfly, identifying Purplish Copper is relatively easy. It's intermediate in size for coppers, smaller than Bronze and Gray coppers but larger than American and Bog coppers. Purplish Copper is quite different on the above side between the sexes, but both are distinctive from other Wisconsin coppers, so this is very helpful in identification. Most

similar in size and appearance is the **Dorcas Copper**, which is a duller orange on the underside. However, we've not encountered this species in the Crex Meadows area. Please see the northwestern Wisconsin online bog article for more on Dorcas Copper. A smaller butterfly, the **American Copper** has much orange on the front wing below, but primarily silver on the hindwing below. We've found it here from May 25 to July 31, and assume that if we surveyed more frequently later in summer, our end date would be later too. As described in the Jackson County online article, this butterfly has a long flight period, but observed flight period in a given year varies greatly. We've seen this at Crex Meadows too—failing to find it in spring or summer visits, or both, in some years. Phantom Prairie is a particularly good spot for this species. Also tiny, **Bog Copper** is primarily silvery-gray. We've only tried once to find this species, a successful attempt on July 23, 2009, at the Reed Lake bog. We've seen Wisconsin's large copper species at Crex Meadows too, but only once each: **Gray Copper** on July 21, 1995, and **Bronze Copper** on July 26, 2001. For the latter, it's possible that if we spent more time in wetlands, we might find Bronze Copper more often. For the former, if we visited more frequently in early to mid-July, I believe that would land more in the Gray Copper's main flight period.

Finding Henry's Elfin

Brown and unobtrusive, Henry's Elfin is about the size of a nickel. Even I, fanatical as I am about elfins, freely admit that although Henry's Elfin is about as striking as an elfin can be, that's still not all that flashy. Perhaps that's the charm: finding something otherwise easily overlooked. Another charm is the mystery of what this species is up to. Locally abundant in our visits out of state farther south, where it associates with redbud, Henry's Elfin is very local and scarce in Wisconsin.

Location, location, location: Our spots here are in or near open woodlands or forest with heathy understory. We've never actually seen this species in the restored brush prairie areas of Crex Meadows. All our sites are in Burnett County Forest,

even though they may now be within the perimeter of the Crex Meadows project area (or may even now be or soon become part of Crex Meadows through property exchange). We've also seen Henry's Elfin on the edge of county forest firebreaks managed with occasional burning, or in adjacent roadsides.

Timing, timing, timing: At least for us, Henry's Elfin is very unpredictable and variable in detection among years. Until recently, I considered northwestern Wisconsin, including this area, more reliable for this elfin than central Wisconsin, until the 2008-2009 Henry's Elfin "outbreak" in central Wisconsin (see the Jackson County online article) that did not appear to happen in the northwest, perhaps due to more pronounced drought. We've only found the species in seven of 15 years when we visited known locations during the flight period. Plus, we've also made a number of visits between April 26 and May 26 (putative flight period), yet found none. Many additional visits throughout the two weeks following this period, when we also found none, may have been after the flight period ended.

Other tips: This rapidly flying elfin is more vertical in its flight behavior than Brown, Hoary, and Frosted elfins. Henry's will also go horizontal, in both straight-line evacuations but also in seemingly territorial circles, back-and-forths, and figure-eights. Henry's may return to the general area where you flushed it from, or it may disappear, of course. Sometimes it seems to be associating with short ericaceous shrubs and gooseberries (*Ribes*), but other times with oaks and other deciduous trees.

Good spot: Our best spots are in Burnett County Forest: Reed Lake Road East and Peet Road (the northwest quadrant and the lupine roadside), Klotts Road North.

Other elfins: Strongly tied to bearberry, the tiny and strongly flying **Hoary Elfin** is locally abundant in northern Wisconsin, and findable in this area. Our best spot is along Peet Road in Burnett County Forest; at Crex Meadows, at Reed Corner, but with lower numbers. Our dates range from April 26 to May 26. **Brown**

Elfin is less abundant in barrens than the bogs highlighted in the northwestern Wisconsin online article. Our observation dates here occur only during May 17-26, with so few individuals that I can't recommend any sites. The most widespread elfin in Wisconsin, **Eastern Pine Elfin** is fond of nectar and mud, and also flies readily both in horizontal and vertical directions. This is the elfin we've found the most here, from April 26 to June 13. A subject of the Jackson County online article, **Frosted Elfin** has not been recorded in this region to my knowledge. Nonetheless, some suitable looking habitat occurs here (e.g., along Peet Road), so it makes sense to be prepared for the possibility of encountering this species.

Finding Western Tailed-Blues

While barely in range in Wisconsin, the diminutive Western Tailed-Blue is readily findable at Crex Meadows, so long as you're prepared to search for a tiny butterfly and take on a rather subtle identification challenge.

Location, location, location: Despite being very range-restricted in Wisconsin, Western Tailed-Blue is widespread in the Crex Meadows area. Its caterpillars feed on herbaceous legumes. Based on the wide range of sites we've found this blue in, it appears tolerant of brush and some trees. So I'm not able to isolate out what specific habitat factors the Western Tailed-Blue keys in on here. But in Wisconsin, Western Tailed-Blue sure can find what it likes in this corner of the state.

Timing, timing, timing: Single-brooded in the spring, Western Tailed-Blue has appeared in our surveys from May 7 to June 13. We've made no earlier visits than this, except in late April. We've found them in June in four years, but not in four other years during June 6-11. On the other hand, we've found them on all May visits except the latest (May 28, in 2006).

Other tips: Even smaller on average than the Eastern version, Western Tailed-Blue is very white and washed-out below, with very minimal orange spots. The male above often has no detectable orange spots, and below, both sexes have at most 1 to 1.5 spots and the black spots are more minimal.

Good spots: Western Tailed-

Blue is found throughout this area. Noteworthy spots in Burnett County Forest are Reed Lake Road East, the Peet Road sites, and Klotts Road North; at Crex Meadows, Phantom Prairie and Reed Corner.

Other blues: Many other blues occur in Wisconsin, and quite a few of them occur in this area during part or all of the Western Tailed-Blue flight period. Since we've targeted many of our survey times and locations to find '**Karner' Melissa Blue**, it's no surprise that this is the blue we've recorded the most here. Please see the next account for more information on this butterfly. Recorded in Wisconsin in the northeast part, **Northern Blue** is state-listed as endangered and very localized in occurrence. I would expect Western Tailed-Blue flight period to be largely finished by Northern Blue flight time. **Greenish Blue** is another northern species that we've not found in Burnett County, perhaps because its flight period primarily occurs in mid- to late June, when we've not visited this area.

The **Eastern Tailed-Blue** has occurred from May 13 to August 18 in our surveys. During Western Tailed-Blue flight period, we've found more Westerns (225) than Easterns (43) even though Eastern can also be abundant here (465 individuals recorded in our summer surveys). This pattern of Easterns increasing in abundance between spring and summer holds in central Wisconsin barrens just as in northwestern Wisconsin. Excluding dates prior to the onset of the Eastern's spring flight period and excluding survey periods in Jackson County that we haven't covered in the Crex Meadows area, we've found overall in the last two decades about 0.5 Easterns per hour in Jackson County in spring (May to June 13) compared to 0.4 per hour in Burnett County, and 4.4 per hour in Jackson County in summer (July 13-August 18) compared to 5.2 per hour in Burnett County. Given how much variation there is in butterfly data, those are pretty similar observation rates! By contrast, we've found 2.3 Westerns per hour in Burnett County on surveys conducted from May through June 13.

When in flight, the **Spring Azure** complex shows a lighter blue color than

most other blues, plus they tend to fly up when disturbed, while tailed-blues typically fly low and horizontally. The subject of much research to figure out what should be considered species or subspecies, this complex turns up over a long season—April 26 to July 31, and no doubt later than we've happened to find. In this area, **Silvery Blue** is abundant. Even with a single flight period in spring (April 26 to June 13 in our surveys here), when the weather is often uncooperative for butterfly observation, this is still the second most abundant blue in our experience here. We've occasionally found one immigrant blue here as well, **Reakirt's Blue** (July 17-31 in 1991, 2000, 2001, and 2004, but spring observations are certainly possible). When active, it has a frenetic flight that combines both horizontal features and vertical ones (but not going above eye-level). We have yet to spot the other immigrant blue, **Marine Blue**, here.

Finding 'Karner' Melissa Blues

Please see the Jackson County online article for details on this butterfly. Here is information specific to Crex Meadows.

Timing, timing, timing: Our spring flight dates range from May 22 (1998, a very warm, early spring) to June 13 (2004, a cool summer), and the latest we've tried. We've found none on visits between April 26 (2006) (unsurprising) and May 26 (2002) (a bit surprising). Three times we failed to find them in June: June 6, 2003, and June 7-8, 2008, but this seems more attributable to low fluctuation and imperfect weather, not timing. We've intended our July visits to hit the second brood, and all our visits then (over 20 years) have succeeded (July 13-31). We've used seasonal development in central Wisconsin to fine-tune when during this July period to time our summer Crex foray. Two August visits (August 9, 2008, and August 17, 2003) also turned up Karners but we found none on August 18, 1989.

Good spots: At Crex Meadows, Karner is widely occurring. All highlighted spots described at the start of this article except the Reed Lake bog, Pumphouse, and Phantom Lake are suitable. Particularly worthy of

mention at Crex Meadows are Phantom Prairie and Reed Corner; in Burnett County Forest, the Peet Road sites are noteworthy.

Other blues: Please see the Western Tailed-Blue account.

Finding Gorgone Checkerspots

Please see the Jackson County online article for details on this butterfly. Here is information specific to Crex Meadows.

Timing, timing, timing: Our spring observation dates range from May 13 to June 13. Visits that were apparently too early in a given year occurred from April 26 to May 23, and too late during June 8-11. While the spring brood usually has strong numbers here, Gorgones can have a very low fluctuation in abundance (as with other butterflies). That's my best understanding of 2006, when we found none at all (May 20, 28 and June 10-11). As in central Wisconsin, so also here, Gorgone Checkerspot has much lower numbers in summer than spring. So it's surprising that in 12 of 20 years, we've succeeded in finding a July Gorgone. These observation dates occurred during July 21-31, with none on July 13-29 visits. So it looks like visits targeting prime Karner time is appropriate for Gorgones—it's just not a guarantee that you'll find them. We've found no Gorgones on our three August visits (August 9-18).

Good spots: At Crex Meadows, Reed Corner, also North Refuge Road (west unit) and Reed Lake access. In Burnett County Forest: Peet Road firebreak (northeast quadrant) and dense lupine roadside, also Klotts Road North.

Other crescents/checkerspots: The predominant crescent here, **Northern Crescent** is way more widespread and abundant than Gorgone Checkerspot, and occurs throughout barrens as well as other habitats. Our observation dates range from May 22 to August 17, similar to what we've seen in central Wisconsin. Unfortunately (except for those enjoying identification conundrums), we believe we've also found a handful of individuals more like **Pearl Crescent** than Northern Crescent in appearance. Even harder than separating Gorgones from crescents is separating these two

crescents from each other. Using the basic wing pattern characters in the field guide, with no guarantee that any one individual ID agrees with a genetic or anatomical identification, we find on our surveys that all but a few individuals allocate as Northern Crescents. However, a few that looked more like Pearl Crescent occurred on a few July surveys.

The other crescent and checkerspots primarily occur in other habitats, so that you would only encounter them sporadically in barrens but could have more luck in adjacent moister areas such as wetter ditches and wetland/stream margins. A localized species in Wisconsin, more frequently reported from more northerly locations in the state, **Tawny Crescent** is easily overlooked, a needle in the haystack of the Pearl/Northern Crescent complex. In fact, we've not found any in Burnett County. If you're very patient, and lucky, maybe you'll find it here, more so if you target moister open meadows than barrens. Mid-June through July to early August would seem to be the time period to try. Since we've not surveyed at all here from mid-June to early July, this may contribute to our lack of experience with this crescent here. **Harris' Checkerspot** is reported to use flat-topped white aster (*Aster umbellatus*) as its caterpillar food plant. Since its flight period is primarily between the Karner broods (mid-June and later), Harris' Checkerspot is usually missed by our surveys. But we lucked into a few individuals on June 11, 2006. **Silvery Checkerspot** has multiple broods, with the few individuals we've found here occurring from May 13 to July 29.

Finding Persius Duskywings

Please see the Jackson County online article for details on this skipper. Here is information specific to Crex Meadows.

Timing, timing, timing: Our observation dates range from May 7 to June 13. We've only failed to find it in May in two years (on May 23) but in June we've missed it four years (June 6-11).

Good spots: We've found this species widely around the area. Our best spots have been in Burnett County Forest (the Peet Road lupine roadside

and Klotts North roadside); in Crex at Riegel Overlook Southwest and Klotts Road South.

Other duskywings: See the Mottled Duskywing account below.

Finding Mottled Duskywings

About as distinct as a duskywing can be, Mottled Duskywing is still an identification challenge. It's also a challenge to find in Wisconsin, but Crex Meadows is a reliable spot. Unfortunately, this species has become harder to find in our surveys in southern and central Wisconsin. So we've come to appreciate more and more when we actually see hope of being flummoxed by this very active skipper that requires a good look to identify!

Location, location, location: Mottled Duskywing is strongly tied to its caterpillar food plant (*Ceanothus*, such as red root and New Jersey tea), low shrubs of upland prairies and barrens. As in other places, so also here, Mottled Duskywing apparently "hilltops," or concentrates on ridges, making hyperactive territorial-like flights. This is a fascinating behavior thought to enhance search opportunities for receptive mates. But it's also frustrating—you'll get a better view, and more of a chance at identification, if the duskywing is mudpuddling, feeding on animal droppings, nectaring, or basking in the cool of the morning.

Timing, timing, timing: We've found twice as many Mottled Duskywings in summer as spring. This species may be like Karners in typically having a larger summer brood than spring. But we've visited a few more times in July (20 years) than May (16 years), and not only is the weather dicier in spring but there's way more kinds of other duskywings to sort through then—so more get away. At any rate, the Mottled Duskywing flight period appears offset a bit earlier than but overlaps well with spring Karners. We've found Mottleds from May 7 to June 13, but only twice in June, with zero in five other years of June visits (June 6-11). Meanwhile, we've failed to find any between May 20 and 28 in only three years, and in these cases the weather was also imperfect (when isn't it!), or we found none that spring at all,

as in 2006 (May 20, 28 and June 10-11). Summer visits for Karners are well timed for Mottled, which we've found in 17 of 20 years of July visits, from July 13-31 (failing on July 21-27 visits in the other three years). We found Mottled once in August (August 9, 2008, a slow, cool summer), but not on August 18, 1989, and August 17, 2003.

Other tips: In spring, the primary challenge is coping with the abundance of other duskywings and spotting the Mottled among them. It helps to watch for individuals mudpuddling and feeding on animal droppings. But also bring an extra dose of patience. Identification is definitely a challenge. Other duskywings can also have a mottled appearance on the front wing above. More patterned as the front wing is, look at the hindwing above instead. Mottling there indicates you have a Mottled Duskywing. If you're not used to seeing a duskywing way out in a dry grassy prairie, be prepared to confuse them in flight with Dusted Skipper (see also that species account).

Good spots: We've found Mottled Duskywing widely around this area, although not in large numbers. Good spots at Crex Meadows include Town Hall Road, Riegel Overlook Northwest and Northeast, Phantom Prairie, North Refuge Road (west unit), North Refuge Road (east unit), Reed Corner, Monson Lake access, and Klotts Road South; in Burnett County Forest, Reed Lake Road East and Peet Road (dense lupine roadside, on east side of road).

Other duskywings: Six other resident duskywings overlap with Mottled in range as well as in time. The two commonest are **Juvenal's** and **Dreamy duskywings**, which we've recorded earlier than our first Mottled (April 26) and on our latest spring Mottled date too (June 13). So you'll have to wade through a lot of these more common duskywings in your searches for Mottled. Mixed in among these will be **Sleepy Duskywing**, very similar to Dreamy but not as abundant in our surveys (recorded from May 7 to June 13). While not a rare duskywing overall, **Wild Indigo Duskywing** does not seem to occur often in this area. However, we have recorded it from May 13 to July 24. As its name suggests, wild indigo (*Baptisia*) is its primary caterpillar food plant. While

many populations have made the switch to the non-native plant, crown vetch, this plant is not widespread in the landscape here. The tiniest of the lot, **Columbine Duskywing** is named for its caterpillar food plant, which lives in other habitats than barrens. While the species has several generations per year, our few encounters here have been in spring (May 26 to June 7). **Persius Duskywing** (see its own account) has a single generation in spring, appearing on our surveys from May 7 to June 13.

Finding Leonard's Skippers

Please see the Jackson County online article for details on this skipper. Here is information specific to Crex Meadows.

Timing, timing, timing: Only once have we found Leonard's on our late July Karner forays, on July 29, 2005 (and not on July 29, 1992 and 2002, or July 31, 2004). Otherwise, we've only found Leonard's on our few August trips (August 18, 1989, when it was abundant; August 17, 2003; August 9, 2008).

Good spots: For how few dates we've spent here, we've found this skipper rather widely around this area. Noteworthy spots in Burnett County Forest are Peet Road (both the firebreak in the northeast quadrant and in the dense lupine roadside); in Crex Meadows at Reed Corner, and back in 1989, along North Refuge Road.

Other grass skippers: In northeastern Wisconsin, you need to be mindful of **Common Branded Skipper**, another later summer skipper (although yellowish), but we've not found it here, even though our surveys in late July should be well timed for this species. We've never seen **Sachem** at Crex Meadows, but this immigrant skipper is a possibility, and is the only skipper with a distinctive white-spot band on the underside (females only) I can think of that could be seen in Leonard's timing. However, Sachem females have a brownish underside background color, not reddish as on Leonard's. Otherwise, a variety of other grass skippers are a possibility, but they won't have as distinctive a spot-band below, and they'll by and large be pretty faded. Mostly they'll be (or once

were, before fading) tan, brown, or dark in hindwing background color, such as **Northern Broken-Dash, Dun, Tawny-edged, and Crossline Skippers**. Alternatively, they may be (or used to be) orangish (not rusty red) in hindwing background color, such as **Delaware Skipper**. Keep an eye out for **Peck's Skipper**, which has multiple broods per year, and so could be fresh at this time of year, but is much smaller, and while highly patterned, does not have a single discrete spot-band. You may have trouble identifying these other skippers, but at least you will be confident they are not Leonard's Skipper. We have not as yet found **Pepper and Salt Skipper**, but my wonderful editor, Ann Thering, has had more luck, finding it on May 23, 2009.

Finding Dusted Skippers

Please see the Jackson County online article for details on this skipper. Here is information specific to Crex Meadows.

Timing, timing, timing: Dusted Skipper timing is similar to but slightly earlier than spring Karners. Our observation dates range from May 17 to June 13. In those years when we visited in June, we failed to find it in only one year (June 6, 2003). Earlier in the season, we've not found Dusted Skipper on visits from April 26 to May 23.

Good spots: Dusted Skipper has occurred abundantly and widely on our surveys here. Our best spots in Crex Meadows are Reed Corner, Phantom Prairie, Riegel Overlook Southwest, and Klotts Road South; in Burnett County Forest: Peet Road (both the firebreak in the northeast quadrant and in the dense lupine roadside) and Klotts Road North.

Other grass skippers: Dusted Skipper is a distinctive dark grass skipper, but two species are close in appearance. About the same size, **Northern Cloudywing** is a spreadwing skipper but can give the appearance of Dusted Skipper, especially with wings completely closed. We find this cloudywing fairly regularly here, and it overlaps in both space and time with Dusted Skipper. We've recorded Northern Cloudywing from May 20 to June 13. Tiny and not often encountered in these sites, **Common Roadside-Skipper** has multiple

broods per year, but has occurred only occasionally on our surveys here, and only in spring (May 22 to June 11). Besides these two species, beware confusion from a **duskywing**, when it perches with its wings shut.

Finding Phlox Moths

Please see the Jackson County online article for details on this moth. Here is information specific to Crex Meadows.

Timing, timing, timing: The flight period is similar between central Wisconsin and here. We've observed this species from May 24 (2009) to June 13 (2004) in the Crex Meadows area. In the 12 years we've put in the special effort to find this well camouflaged moth, we've succeeded in all except one: 1998. Since the phlox was at peak flower on our survey date that year (May 22), I believe our timing was good but it was likely a very low abundance year. In 2006, we also found none on June 10-11 but were successful on May 28.

Other tips: Burning in spring can delay phlox flowering, or may suppress it, so that flowers may be scarce during the moth's flight period. However, a skip that didn't burn (such as a pocket gopher mound) may offer the only flowers around. As a result, this can be a profitable place to look for the moth, because of the local scarcity of a resource critical to the moth. Likewise, check ditches next to burns, or areas immediately across the road or firebreak from a burn, for moths concentrating on phlox flowers there.

Good spots: Our best spots at Crex Meadows have been Reed Corner, East Refuge Road West, North Refuge Road East, Phantom Prairie, Reed Lake, and Camp 8; in Burnett County Forest, the Peet Road sites (both the firebreak in the northeast quadrant and the dense lupine roadside).

Other moths: While tiny, this moth is distinctive and does not have confusing look-alikes.

Finding Leadplant Moths

Well hidden in plain sight, the Leadplant Moth is a marvel of color and pattern. If you've taken a stab at searching for Phlox Moths earlier in the season, this moth will be pleasantly refreshing. It's sufficiently large not

to stress presbyopic eyes and its caterpillar food plant, where it prefers to perch, is sturdier and taller, and not as hard on creaky backs. So this moth that is readily findable during the day is a wonderful way for butterflyers to enter the much more diverse world of moths.

Location, location, location:

It's all about the leadplant (*Amorpha canescens*), the caterpillar food plant. Since this plant abounds here, this area can support the moth too.

Timing, timing, timing: Based on flight dates in southern Wisconsin, I figure our mid- to late July Karner visits are past peak for this moth. However, we have found the moth during July 23-29 and once in August (August 8, 2008, a very worn individual).

Other tips: Most individuals we've found have been on a leadplant flower stalk, either at peak flower or pre-peak with some unopened buds, for which the moths are well camouflaged. This moth comes in two color forms: reddish and lavender. Fortunately, the moths are quite sedentary, much more so than Phlox Moths. While they may be active (nectaring, moving around the flower stalk), Leadplant Moths are disinclined to flush, at least that we detect. Even on a hot afternoon, Leadplant Moths are quite amenable to staying put and therefore being findable. The moths may also perch on other parts of leadplant, as on a leaf, where the moths are not at all camouflaged! And it's not possible for Leadplant Moths to hide themselves within a leadplant flower head (due to the architecture of the flower stalks and relatively large size of the moth), also unlike the flowers of the Phlox Moth's caterpillar food plant.

Good spots: At Crex Meadows: Reed Lake Road just east of North Refuge Road, Riegel Overlook Southwest, and Town Hall Road. It's highly likely that with more surveys a bit earlier in the season, many other places would be found to be good spots.

Other moths: This moth is an identifier's dream, with no confusing look-alikes.

Wetland skippers

Since the wetland skippers of Crex Meadows deserve as much interest and surveying as the barrens, a detailed account awaits another person's efforts.

But even in passing, with the skippers "leaking" upland into the edges of barrens and us "leaking" down into the edges of their habitat, we've realized we've seen the tip of a very diverse and intriguing iceberg of butterfly interest. As a result, we indulge in cursory jumps into the water in and near flowages and wetland potholes. Also watch nectar flowers along adjacent roadsides. Our favorite spots include the flowages by the Pumphouse, Phantom Lake, Phantom Prairie (in the low spot), and the potholes along North Refuge Road. Although it has a long flight period, we've only found **Least Skipper** from July 21 to August 18. **Long Dash** has turned up from June 11 to July 31 in our surveys. The mid-summer bustle includes **Broad-winged Skipper** (July 13-31), **Dun Skipper** (July 13-August 17), **Dion Skipper** (July 21 to August 9), **Black Dash** (July 21-August 9), and **Mulberry Wing** (July 26). I'm surprised we've not found a **Two-spotted Skipper**, but maybe if we visited earlier in July, we'd succeed in finding this localized skipper here.

Immigrant butterflies

Over time, with a watchful eye, you'll turn up a variety of immigrant butterflies here. **Variiegated Fritillary** is the species we've found the most of, from July 8 to August 17. Next is **Painted Lady** (June 7 to July 29), **Checkered White** (July 21-26), **Common Buckeye** (June 8-July 29), and **Reakirt's Blue** (July 17-31). We've had single individuals of **Gray Hairstreak** (July 26), **Little Yellow** (July 26), and **Dainty Sulphur** (July 26). Immigrant skippers are conspicuously absent from this list. Either we're overlooking them, or they don't usually wander that far north.

*You can find images of the butterflies described in this article in **Butterflies through Binoculars: the East** by Jeffrey Glassberg.*

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