

YARD & GARDEN REPORT

June 20, 2016

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Invite Butterflies to Your Yard!

Would you like to add some excitement to your garden? Invite butterflies! Their delicate wings and fluttering movements are absolutely enchanting.

It's easy to attract butterflies—simply give them what they want. In the fairy tale *The Butterfly*, the winged creature summed up its needs as follows: “Just living is not enough ... one must have sunshine, freedom and a little flower.”

We can do that!

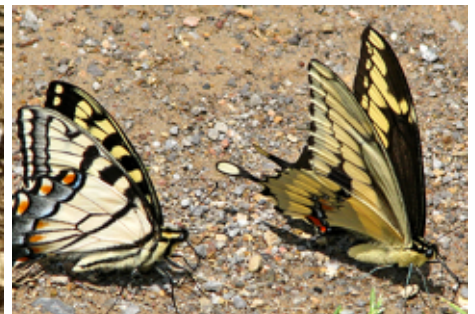
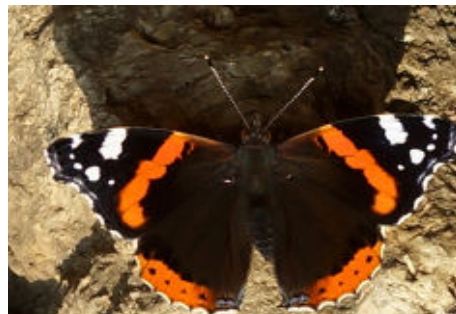
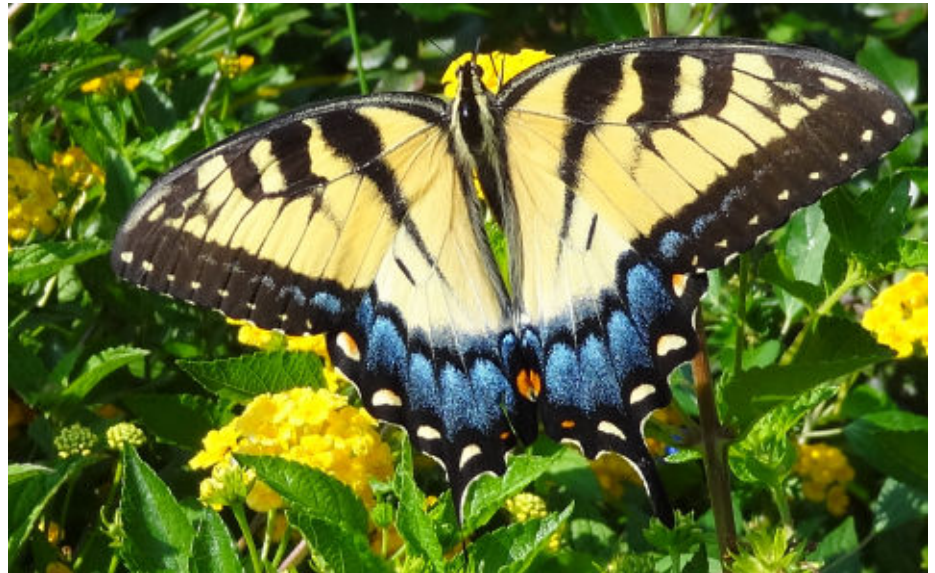
Start with *sunshine*. Select a sunny site that is sheltered from our harsh prairie winds.

Butterflies love to sunbathe. Create a warm resting spot for them by placing dark rocks in the garden (Fig. 2). Butterflies will enjoy the *freedom* of flight once their bodies have warmed to 85 to 100 degrees.

Give them a *little flower*. Better yet, give them lots of little flowers. Select flowers that make nectar available from spring through fall. Butterflies are attracted to purple, orange, yellow, red and dark pink flowers. Popular choices include blazing star, butterfly bush, phlox, cleome, coneflower, sedum, goldenrod, cosmos, dianthus and zinnia. Don't forget milkweed—it's essential for monarchs.

Butterflies need water. Puddles of water provide the hydration and minerals needed for good health and successful breeding (Fig. 3).

Limit pesticide use to a minimum. Chemicals that kill insect pests will



Figs. 1–3. A Canadian tiger swallowtail feeds on nectar of lantana; a red admiral casts its shadow while basking on rocks; swallowtails gather minerals from soil.

kill butterflies. Spray pests with insecticidal soap. Soaps will not leave residues that threaten butterflies.

Butterflies need a home to raise their young. Grow plants for butterflies to lay eggs upon and for the emerging caterpillars to eat. Popular choices include birch, butterfly bush, oak, hackberry, willow, dill, parsley and hollyhock.

For more information, download the NDSU publication *Butterfly Gardening in North Dakota*.

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Butterflies of North Dakota

When I say “butterfly,” most of us think of an orange monarch. Yes, the monarch migrates here every summer. But did you know there are more than 160 other butterflies in North Dakota? Here is a sampling that shows the brilliance of these gentle creatures. How many can you identify? The answers are on page 4.

- | | |
|-------------------------|------------------------|
| _____ Alfalfa butterfly | _____ Monarch |
| _____ Black swallowtail | _____ Mourning cloak |
| _____ Cabbage butterfly | _____ Peck’s skipper |
| _____ Gray hairstreak | _____ Regal fritillary |
| _____ Melissa blue | _____ White admiral |



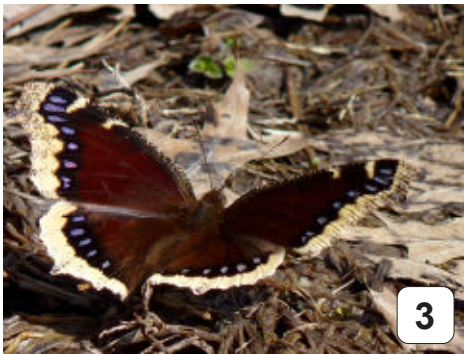
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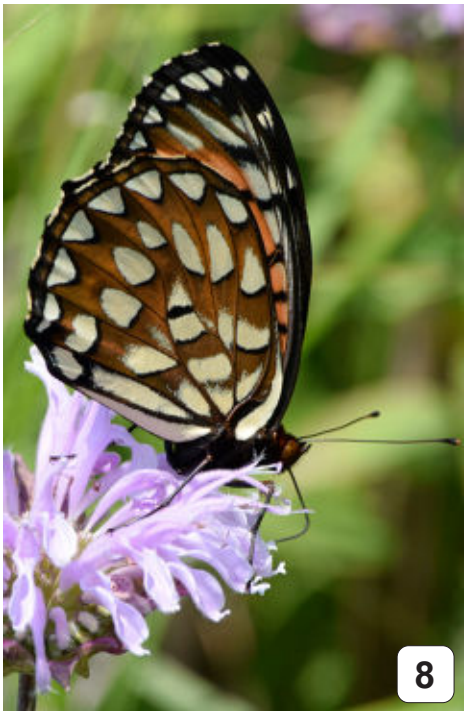
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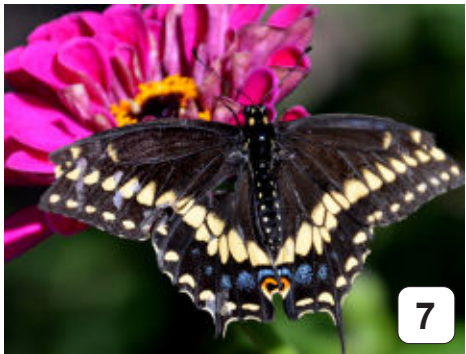
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7



9



10

Survey of problems found in North Dakota yards and gardens:

TREES AND SHRUBS



Fig. 14. Herbicide injury

Leaves become elongated, curled or cupped. Most woody plants survive. In the future, use herbicides only when needed. Spray when wind is minimal; use heavy droplets; avoid hot days.



Figs. 15, 16. Spruce sawfly

Yellowheaded spruce sawfly defoliates spruce, beginning with young needles. Insecticidal soap kills young larvae. Carbaryl, acephate or cyfluthrin is recommended for large infestations.



Figs. 17, 18. Aphids

Leaves curl. Pry open leaf to reveal pests. The excrement is sticky and glistens. Minor damage. Jet spray with water. Spray of systemic acephate may be justified for young trees.



Fig. 19. Gall on viburnum

Eriophyid mites feed on leaves in early spring. This causes a hormonal reaction, leading to leaves curling and developing pink streaks. Damage is cosmetic. No pesticides are needed.



Fig. 20. Galls on leafy trees

Mites or aphids pierce leaves, creating bumps. Silver maple, hackberry and linden are often affected. Damage is mostly aesthetic. Pesticides are not useful as pests are gone now.



Fig. 21. Cottony maple scale

Egg sacs appear on maples, elms and lindens. Crawlers hatch in late June/early July and feed on sap. Ladybugs and other natural enemies usually control this pest. Insecticidal soap, acephate or summer oils kill crawlers.

FLOWERS



Fig. 22. Rust on roses

Orange, powdery pustules develop on leaves and stems. Prune out infected leaves and branches. Avoid getting foliage wet when irrigating. Fungicides (triforine, sulfur) may be applied every 10 days to prevent spread.

FRUITS



Fig. 23. Plum pockets

Unripe fruits become unusually large, hollow and spongy. Remove infected fruits before spores emerge. May be prevented with spray of Bordeaux mix (copper sulfate), lime sulfur or chlorothalonil before bud break in spring.



Figs. 24, 25. Plum curculio

Weevils lay eggs in plums. Larvae develop inside fruits, which rot and drop. Remove infested fruit ASAP. Next spring, shake blooming branches over cardboard to detect pests. Spray spinosad or carbaryl after petal fall.

Survey of problems found in North Dakota yards and gardens:

VEGETABLES



Fig. 26. Twisted vines

Pesticide drift or contaminated manure may cause extreme curling of foliage. Plants will be stunted and vegetables may be contaminated. Replanting is recommended for drift situations.



Fig. 27. Flea beetle

Tiny (1/8-inch) pests create shotholes in radish and leafy greens. Young seedlings are very sensitive. Consider spraying carbaryl, neem or pyrethrin if 10–30% defoliation.



Fig. 28. Asparagus beetle

Spears become scarred and bent. Pick beetles and throw into soapy water. Remove eggs off spears. Large plantings may be sprayed with pyrethrins, malathion or carbaryl.

WEEDS



Figs. 29, 30. Horseweed

Annual weed forms an erect, leafy, branchless spike, 3–6 feet tall, with tiny puffball seedheads. Cultivation recommended. Susceptible to 2,4-D; resistant to glyphosate.



Fig. 31. Leafy spurge

Perennial weed with vigorous roots. Distinctive yellow-green flowers with heart-shaped bracts. Resistant to many herbicides but susceptible to quinclorac (Drive, Weed B-Gon Max Plus Crabgrass Control).



Fig. 32. Thistle

Cut down to prevent seed dispersal; expect plants to resprout. Spot spray with dicamba or glyphosate. Fall applications are best at moving herbicide throughout its roots.



Fig. 33. Foxtail barley

Short-lived, shallow-rooted perennial grass found in recently disturbed sites such as new residential areas. Cultivate or pull out. Spot spray with glyphosate.



Fig. 34. Sweetclover

Cut down or spray before seeds disperse. Use 2,4-D amine, dicamba or glyphosate. Biennial; blooms and sets seeds its second year, then dies. Seeds stay viable for 30 years.

Butterfly Matching Answers

1. Alfalfa butterfly (*Colias eurytheme*).
2. White admiral (*Limenitis arthemis*).
3. Mourning cloak (*Nymphalis antiopa*).
4. Melissa blue (*Plebejus melissa*).
5. Monarch (*Danaus plexippus*).
6. Cabbage butterfly (*Pieris rapae*).
7. Black swallowtail (*Papilio polyxenes*).
8. Regal fritillary (*Speyeria idalia*).
9. Peck's skipper (*Folites peckius*).
10. Gray hairstreak (*Stymon melinus*).

Weather Almanac for June 7–June 19, 2016

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS ^{1,2}			
	June 7–19				June 7–19		2016		June 7–19		2016	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	66	63	92	43	1.93	1.69	5.89	7.61	203	159	616	504
Bowman	70	62	99	45	0.56	1.42	5.56	7.65	230	146	622	455
Carrington	67	64	87	42	1.44	1.65	5.47	8.15	209	174	608	540
Crosby	67	61	91	48	1.12	1.26	5.53	6.24	202	142	587	454
Dickinson	70	61	97	50	0.69	1.59	4.81	7.53	235	151	630	484
Fargo	71	66	89	44	0.39	1.72	4.55	9.26	266	192	733	587
Grafton	67	63	86	45	4.70	1.60	12.63	8.16	213	163	639	521
Grand Forks	68	64	89	46	1.67	1.48	8.10	7.86	232	166	682	530
Hazen	68	64	94	43	0.29	1.53	5.33	7.62	221	170	652	570
Hillsboro	69	65	91	44	1.03	1.53	5.85	8.56	241	179	691	547
Jamestown	68	64	88	45	1.44	1.47	8.06	7.75	229	171	647	523
Langdon	65	61	85	41	2.45	1.71	7.75	7.63	195	135	560	420
Mandan	69	64	94	46	1.54	1.43	7.64	7.30	228	165	645	503
Minot	67	63	91	46	1.74	1.55	6.74	8.22	204	155	613	467
Mott	69	63	97	45	0.59	1.20	4.89	8.03	224	158	621	497
Rugby	68	63	93	48	2.17	1.51	6.35	8.28	218	159	641	517
Wahpeton	71	67	91	44	0.45	1.35	5.74	8.87	254	204	723	628
Watford City	69	62	98	49	0.30	1.26	4.79	6.42	229	153	628	495
Williston	68	65	94	51	0.96	1.17	5.05	6.10	219	177	634	572
Wishek	67	62	87	47	1.10	1.54	6.93	9.23	216	146	580	457

DAYLENGTH (June 19, McClusky, center of ND)³

Sunrise: 5:44 AM | Daylength: 15h 58m
 Sunset: 9:42 PM | Change since June 6: +9m

LONG-TERM OUTLOOKS⁴

June 26–30: Temp.: Above Normal; Precip.: Below Normal
 Jun 28–Jul 4: Temp.: Above Normal; Precip.: Below Normal

¹ GDDs for garden vegetables are not available. GDD data in this table are for corn, which responds to temperature as most vegetables grown in gardens. Data begin May 1 with base minimum and maximum temperatures of 50 and 86°F., respectively.

^{2,3,4} Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.

Credits

Knodel, J., G.M. Fauske and R.C. Smith. 2004. Butterfly gardening in North Dakota. North Dakota State Univ. Publ. E-1266. Fargo, ND.

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