

In Memoriam

Richard H. Smith

September 7, 1944 - August 8, 2016

“Find the habitat and you’ll find the butterfly.”



If Dick were a butterfly....



Looks like a
White M
Hairstreak



or a common
Gray Hairstreak,
but very very rare!



*"Northern" Southern Hairstreak
AKA Northern Oak Hairstreak*

*Ellicott City, 5/23/12
Kathy Litzinger*

he would be a "Northern Oak Hairstreak."

Lepidopterist



A picture is worth a thousand words.



With Dick, it was often worth
MORE than a 1,000 words.

Educator & Mentor



Conservationist “Find the habitat and you’ll find the butterfly.”

Helped preserve, enhance & create new habitat

- Ekhorn Community Meadow
- Emy’s Meadow
- Private Meadows

Emy’s Meadow
2015
Howard County Parks Dry Meadow Pollinator Seed Mix
Selected by Richard Smith, Updated: 10/6/2014 Supplier: Ernst Seed Company: www.ernstseed.com 800-873-3321

Type	%	Common Name (*High Value)	Species	Eco type	# Seeds In this Selection	Bloom Period	Moisture	Nectar Plant	Host Plant
Grass	40.0%								
	29.0%	Purpletop*	Tridens flavus		134,850.00		D		H
	11.0%	Timothy *Climax**	Pheum pratense		127,990.00		D		H
Legumes	35.3%								
	2.2%	White Clover *Dutch**	Trifolium repens		17,072.00	June	M	N	H
	6.6%	Sweet Yellow Clover	Mellilotus officinalis	Non-Native	17,094.00	May	D	N	
	26.5%	Partridge Pea	Chamaecrista fasciculata	PA	17,225.00	Sept	D	N, P	H
FORBS	24.7%								
	3.500%	Purple Coneflower	Echinacea purpurea		5,000.00				
	1.750%	Giant Ironweed	Veronica spicata		2,500.00				
	0.400%	Wild bergamot	Monarda spicata		500.00				
	0.400%	Mistflower	Conoclinium sp.		500.00				
	0.400%	Showy Goldenrod*	Rudbeckia hirta		500.00				
	7.500%	Common Milkweed	Asclepias tuberosa		10,000.00				
	7.500%	Butterfly Milkweed	Asclepias tuberosa		10,000.00				
	2.000%	Grassleaf Blazing Star	Liatris scariosa		2,500.00				
	0.750%	Heath Aster*	Aster sp.		1,000.00				
	0.400%	Joe Pye Weed	Eupatorium sp.		500.00				
	0.100%	Lanceleaf/Grassleaf Goldenrod	Rudbeckia sp.		125.00				



- Initiated Annual HOCO Butterfly Survey
- Monitored habitat & occurrence levels of MD species -
“Butterfly Records for MD, DE, & DC”
“Butterflies of Unknown Status in MD & DE”
- Performed MD Natural Heritage Program field surveys to locate and document rare species & habitats

2013 – 2016 Howard County Butterfly Survey

Originated in 2013 by Dick Smith, Jo Solem & Sue Muller as a Howard County Bird Club & Howard County Recreation & Parks project to:

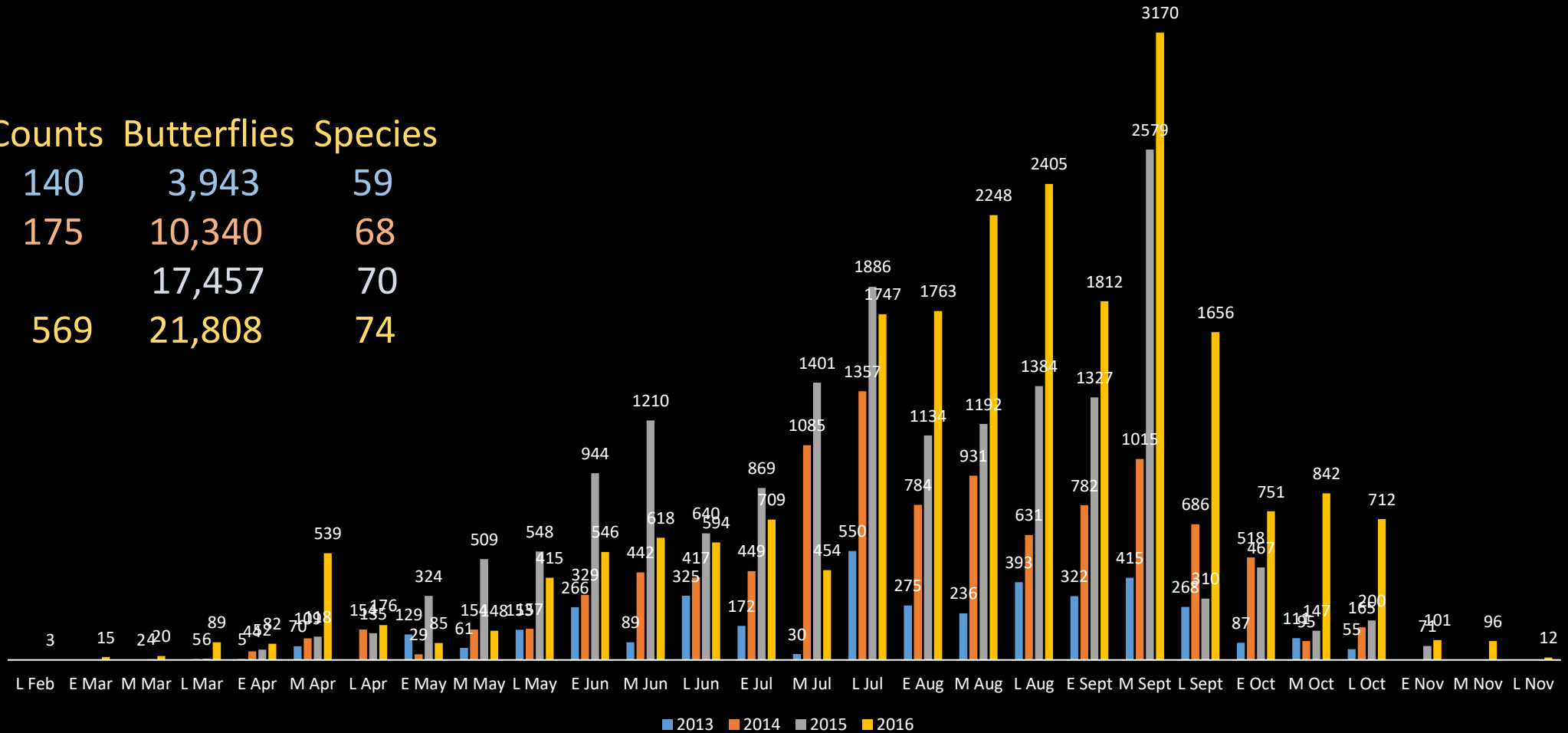
1. to track changes in species and populations over a long period of time.
2. to establish local species brood peaks and gaps.



2013 - 2016 Butterfly Occurrence

Survey Length & Frequency: Mid-April to Mid-October, Every 2 Weeks

No.	Counts	Butterflies	Species
2013	140	3,943	59
2014	175	10,340	68
2015		17,457	70
2016	569	21,808	74



Still No Recent Sightings



Northern Oak
Hairstreak 2012



Striped Hairstreak
2013



Mulberry Wing
2012

Still Unknown!

Hoary Edge
Dreamy Duskywing
Sleepy Duskywing
European Skipper
Brown Elfin

Still Extirpated?

Appalachian Azure-X
Regal Fritillary-X
Silver-bordered Fritillary-X
Common Roadside-Skipper-X

Leonard's Skipper-X
Delaware Skipper-X
Black Dash-X



Harvester (A. Allor & B. Ott)
2013 - 2016: multiple sightings



"Spring" Azure (B. Ott, R. Orr)
2014 Not differentiated 2015-2016



Clouded Skipper
2012



Long-tailed Skipper
2012



Dusted Skipper (L. Hunt)
2014 - 2016: multiple sightings



Checkered White, female
Haver, 9/12/16
Jim Wilkinson

Checkered White
2008 & 2016 (2)



Little Yellow
9-13-13 Gateway
Wilkinson

Little yellow
2013



Cloudless Sulphur
Mt. Pleasant 8-11-13
L. Hunt

Cloudless Sulphur
2013



Silvery Checkerspot
Beaverbrook 7-31-14
Richard Orr

Silvery Checkerspot
2013: 50+ (MPEA), many locations
2014: 1-5, 3 locations



Meadow Fritillary
Western Regional Park 7-21-14
Linda Hunt

Meadow Fritillary
2013: 50+ (Jennings Chapel)
2014: 1



Sleepy Orange
Clemons Crossing 8-2-14
Linda Hunt

Sleepy Orange
2012: multiple sightings 2014: 8



Coral Hairstreak
Higley Mill PRSP 6-30-14
Linda Hunt

Coral Hairstreak (J. Sheppard)
2013 - 2016: multiple sightings

butterfly larval host **Celtis occidentalis**: **common or northern hackberry** **nettletree** cork-like bark with wart-like protuberances The leaves are distinctly asymmetrical and coarse-textured. It produces small fruits that turn orange-red to dark purple in the [autumn](#), often staying on the trees for several months. The common hackberry is easily confused with the [sugarberry](#) (*Celtis laevigata*) and is most easily distinguished by range and habitat. Max height 130' prefers bottomlands and soils high in [limestone](#). Its [shade tolerance](#) is greatly dependent on conditions Hackberry grows in many different habitats The leaves are eaten by four gall-producing insects of the *Pachypsylla* genus, which do not cause serious damage to the tree. A number of insects and fungi cause rapid decay of dead branches or roots of the tree. The tree's pea-sized berries are edible, ripening in early September. Unlike most fruits, the berries are remarkably high in calories from fat, carbohydrate and protein, and these calories are easily digestible without any cooking or preparation The small berries, hackberries, are eaten by a number of birds and mammals. Leaves are ovate, serrated (toothed) with pointed tip and uneven (oblique) at the base. Flowers are greenish in May; Leaves yellow in autumn. Branches of this and other hackberries may become deformed due to bushy growths called witches-brooms produced by mites and fungi.

Celtis laevigata: southern or sugar hackberry Sugarberry has narrower leaves which are smoother above. The species where the ranges overlap (MD has occidentalis), common hackberry occurs primarily in upland areas, whereas sugarberry occurs primarily along streams and in moist soils on [floodplains](#). Its fruit are eaten by [birds](#), helping them disperse seeds. Leaves are eaten by a number of insects, for example [caterpillars](#) of the lo moth (*Automeris io*).

Sugarberry's [leaf litter](#) contains [allelopathic chemicals](#) that inhibit seed germination and growth in many other plants.



*Hackberry leaves
Sykesville, 8/26/15
Linda Hunt*

Larval Host Plant for:
Hackberry Emperor
Tawny Emperor
Snout
Question Mark (nettles, elm)
Mourning Cloak (willow, elm)

Ulmaceae (Elm Family)



*Hackberry bark
Sykesville 5/25/15
Linda Hunt*

A monarch butterfly with orange and black wings is perched on a branch of a plant with clusters of small red berries. The background is a soft-focus green.

You can participate in the butterfly survey by:

- Doing a survey at a specific site or your garden
- Looking for and counting a specific butterfly all season (i.e., Monarch, Eastern Tiger Swallowtail)
- Reporting locations where you see lots of butterflies
- Taking pictures of butterflies and sending them to us
- Looking for specific trees/plants or habitats and reporting what you find
- Planting butterfly nectar and host plants

Monarch
UMD Farm 8-20-14
Linda Hunt

Survey Volunteers



Spicebush Swallowtail

7-25-14

Mike McClure

2013 (prototype year): 8 surveyors

Ann Coren, Linda Hunt, Allen Lewis, Kathy Litzinger, Suzanne Probst Jay Sheppard, Kate Tufts, Jim Wilkinson

2014: 22 surveyors & contributors

Ann Coren, Jeff Friedhoffer, David Gillum, Karen & Kevin Hefferman, Emy Holdridge, Linda Hunt, Suzanne Klick, Asuncion Lavind, Allen Lewis, Kathy Litzinger, Grazina & Mike McClure, John McKitterick, Sue Muller, Richard Orr, Bonnie Ott, Suzanne Probst, Kurt Schwarz, Jo & Bob Solem, Jim Wilkinson

2015: 41 surveyors & contributors

Rene & Paul Bade, Gill Bentley, Alicia Buxton, Carol, Ward Ebert, Field, Sherry Fisher, Linda Giampalmo, Pat Greenwald, Karen & Kevin Hefferman, Gayle & Bill Hill, Linda Hunt, Mike Kerwin, Suzanne Klick, Clayton Koonce, Jenny Krantz, Asuncion Lavind, Kathi Lillie, Kathy Litzinger,, Grazina & Mike McClure, John McKitterick, Woody Merkle, Sue Muller, Bonnie Ott, Howard Peterson, Norma Petersen, Paul Petkus, Suzanne Probst, Tim Reichard, Kurt Schwarz, Richard Smith, Sharon Smith, Jo & Bob Solem, Strozyk, Kate Tufts, Jim Wilkinson

2016: 49 surveyors & contributors

Rene & Paul Bade, Kathy Barylski, Bowman, Alicia Buxton, Carol, Field, Fisher, Linda Giampalmo, Pat Greenwald, Karen & Kevin Hefferman, Gayle & Bill Hill, Linda Hunt, Suzanne Klick, Clayton Koonce, Krantz, Asuncion Lavind, Kathi Lillie, Kathy Litzinger, Lund, Lydon, Lyson, Grazina & Mike McClure, Sue Muller, Nancy Magnusson, John McKitterick, Woody Merkle, Richard Orr, Bonnie Ott, Parsa, Paul Petkus, Peterson, Suzanne Probst, Reeser, Tim Reichard, Rutter, Kurt Schwarz, Sikorski, S. Smith, Jo & Bob Solem, Strozyk, Stirrat, Kate Tufts, Wallace, Jim Wilkinson, Carol Zancan



Emy's Meadow

2015

Howard County Parks Dry Meadow Pollinator Seed Mix

Selected by Richard Smith, Updated: 10/6/2014 Supplier: Ernst Seed Company: www.ernstseed.com 800-873-3321

Type	%	Common Name (*High Value)	Species	Eco type	# Seeds in this Selection	Bloom Period	Moisture	Nectar Plant	Host Plant
							W=Wet M=Moist D= Dry	N=Nectar P=Verces Pollinator List	
Grass	40.0%								
	29.0%	Purpletop*	Tridens flavus		134,850.00		D		H
	11.0%	Timothy 'Climax'*	Phleum pratense		127,930.00		D		H
Legumes	35.3%								
	2.2%	White Clover 'Dutch'*	Trifolium repens		17,072.00	June	M	N	H
	6.6%	Sweet Yellow Clover	Mellilotus officinalis	Non-Native	17,094.00	May	D	N	
	26.5%	Partridge Pea	Chamaecrista fasciculata	PA	17,225.00	Sept	D	N, P	H
FORBS	24.7%								
	3.500%	Purple Coneflower	Echinacea purpurea	Commercial	5,250.00	Jul-Aug		N, P	
	1.750%	Giant Ironweed	Vernonia gigantea (altissima)	PA	5,250.00	Aug-Oct	M	N	
	0.400%	Wild bergamot	Monarda fistulosa	Commercial	5,088.00	Jun-Sept	D/M	N, P	
	0.400%	Mistflower	Eupatorium coelestinum (Conoclinium coelestinum)	VA	6,000.00	Sept (Jul-Oct)	D/M/W	N, P	
	0.400%	Showy Goldenrod*	Solidago speciosa	S. WV	5,360.00	Jul-Oct	D/M	N, P	
	7.500%	Common Milkweed*	Asclepias syriaca	PA	5,250.00	June (May - Aug)	D	N, P	H
	7.500%	Butterfly Milkweed*	Asclepias tuberosa	Midwest	5,250.00	July (May - July)	D/M	N	H
	2.000%	Grassleaf Blazing Star*	Liatris pilosa/graminifolia	NC	5,800.00	Aug-Oct	D/M	N	
	0.750%	Heath Aster*	Aster pilosus/ericoides (Symphyotrichum ericoides)	PA	5,250.00	Jul-Nov	D/M	N	H
	0.400%	Joe Pye Weed	Eupatorium fistulosum	PA	5,760.00	Jul-Oct	D/M/W	N	
	0.100%	Lanceleaf/Grassleaf Goldenrod	Solidago graminifolia	PA	5,600.00		M/W	N	