

Moths of South Florida



Eugene Lin and Jimmy Lange

FAIRCHILD TROPICAL BOTANIC GARDEN

Introduction

We created this guide to the Moths of South Florida in honor of National Moth Week (July 23 -31), in the hopes of drawing attention to this often overlooked group of organisms, the moths. Moths are insects in the Order Lepidoptera, which is made up of butterflies and moths. The Lepidoptera contain at least 32 superfamilies in North America, only one of which--the Papilionidae--contains butterflies. That means the vast majority of Lepidopteran diversity comes from moths! However, we know very little about most species in terms of their ecology or even what they eat as caterpillars. We surely don't know all of the species in our area. From a conservation standpoint, we need to try to learn more about this diverse group in order to understand our ecosystems how to protect them. So please, get out there and observe! There are many great resources available to help. Let's work together to increase our understanding of this fascinating group of organisms in our region, or just simply enjoy some time outside.

Using this guide:

This guide is by no means comprehensive, and certainly favors more conspicuous species. This means that most of the moths in this guide are large, discernable, and often fly during the day. We attempted to represent a number of evolutionarily distinct groups, whether superfamily or family, and each group is presented in taxonomic order (i.e. in order of evolutionary history). The superfamily is in all caps on the side, followed by either family or subfamily, depending on the usefulness and availability of a common name, the idea being to get people recognizing groups. If the family name is the same as the superfamily, only one is listed. Common names for each species (where available) are listed in the top left of each box followed by the scientific name in parentheses. Each box will typically have two photos; one adult and one larva. We also list: wingspan (useful for knowing what size you'd be looking for), host plant (known plants utilized by larvae), and range (where the species has been documented). Some moths can eat a wide variety of plants, and here they are listed as "generalists", which is often an oversimplification. In this case, search links below for recorded host plants. Photo credits are listed in the back of the guide. There will often be much more information than we are able to provide, so please take advantage of the great online resources listed below for all things moths.

Helpful resources:

<http://nationalmothweek.org/>

Moth identification:

[Bugguide.net](http://bugguide.net) (great for posting photos of your unknown insects. When you find the species you're looking for, click "info" in the top left to learn more)

[Mothphotographers.msstate.edu](http://mothphotographers.msstate.edu)

[Butterfliesandmoths.org](http://butterfliesandmoths.org)

Host plants:

<http://www.nhm.ac.uk/our-science/data/hostplants/search>

<http://www.brc.ac.uk/dbif/>

Scientific name

Common Name

Super Family

Lesser Wasp Moth (*Pseudocharis minima*)



46.

Wingspan: 30-35 mm

Host plants: *Crossopetalum* spp.

Range: S FL mainland and the Keys (endemic)



47.

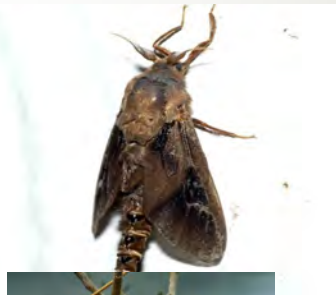
OWLET MOTHS AND KIN - Tiger Moths

**Family/
Sub-
Family**

Photo Credits

TINEOIDEA—BAGWORM MOTHS

Abbot's Bagworm (*Oiketicus abbotii*)



Wingspan: 33mm

Host plants: Generalist

Range: Southeastern U.S. to Texas



2.

1.



3.

Ailanthus Webworm (*Atteva aurea*)



Wingspan: 18-30 mm

Host plants: Tree of Heaven (*Ailanthus* spp.)

Range: E. North Am to S. Central Am, West Indies

98.



99.

PLUME MOTHS

Ragweed Plume Moth (*Adaina ambrosiae*)



Wingspan: 13-17 mm

Host plants: Asteraceae, mainly Ragweed (*Ambrosia*)

Range: Across US, West Indies

102.



103.

Black-shaded Platynota Moth (*Platynota flavedana*)



Wingspan: Range: 5-8.5mm

Host plants: Generalist

Range: East United States

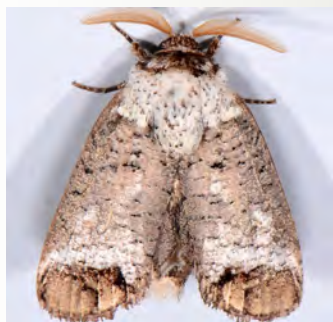
100.

101.



CARPENTER AND LEOPARD MOTHS

Pecan Carpenterworm Moth (*Cossula magnifica*)



Wingspan: 32-45 mm

Host plants: Wood borers; Pecan, hickory, oaks, persimmon

Range: Southeast US

104.



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105.

Saddleback (*Acharia stimulea*)

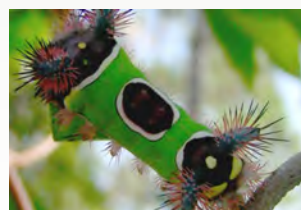


60.

Wingspan: 26-43 mm

Host plants: Generalist

Range: MA-FL, MO-TX



61.

ERMINE MOTHS AND KIN—Tropical Ermines

TORTRICIDS

ZYGAENOIDEA -Slug Caterpillars

ZYGAENOIDEA-Flannel Moths

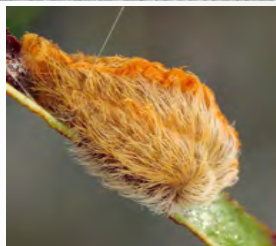
Southern Flannel (*Megalopyge opercularis*)



64. **Wingspan:** 24-36 mm mm

Host plants: Generalist esp. oak and elm

Range: Widespread Eastern U.S, Central America, Northern South America



65.

Grapeleaf Skeletonizer (*Harrisina americana*)



35.

Wingspan: 18-28 mm

Host plants: Grape foliage, Redbud, Virginia Creeper

Range: Mexico-South America. SC-FL, AR-TX



36

ZYGAENOIDEA-Leaf Skeletonizers

WINDOW-WINGED MOTHS

Seagrape Borer (*Hexeris enhydris*)



97.

Wingspan: 34-38 mm

Host plants: Wood borer: Sea Grape and Pigeon Plum

Range: Central and Soutehrnm florida to Keys, Cuba, Central America

Dichogama amabilis



15.

Wingspan: ~25 mm

Host plants: Jamaican Capertree

Range: Puerto Rico, Cuba, FL



16.

PYRALOIDEA-Crambid Snout Moths

PYRALOIDEA -Crambid Snout Moths

Fiddlewood Leafroller (*Epicorsia oedipodalis*)



25.

Wingspan: 37-39 mm

Host plants: Fiddlewood (*Citharexylum*), Sea Grape & Pigeon Plum (*Coccoloba* spp.), Lancewood (*Nectandra*)

Range: Caribbean, FL



26.

Hyalorista taeniolalis



Host plants: Devil's-claw (*Pisonia aculeata*) and Nyc-taginaceae

Range: CA, FL, TX

41.

PYRALOIDEA -Crambid Snout Moths

PYRALOIDEA -Crambid Snout Moths

Coffee-loving Pyrausta (*Pyrausta tyralis*)



84

Wingspan: 16-20 mm

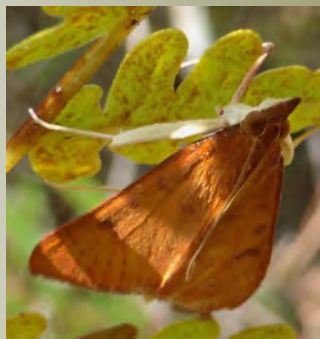
Host plants: Wild coffee, Purplestem Beggarticks, *Dahlia*

Range: Widespread (FL-AZ, NY-IL)



85.

Genista Broom (*Uresiphita reversalis*)



31. **Wingspan:** 27-34 mm

Host plants: Generalist

Range: Widespread (CA-ME, FL-Puerto Rico)



32.

PYRALOIDEA-Crambid Snout Moths

Satin White Moth (*Palpita flegia*)



50.

Host plants: Yellow Oleander

Range: FL-TX



51.

Dot-lined White (*Artace cribrarius*)



Wingspan: 25-62 mm

Host plants: Oaks, Cherries, and Rose

Range: Southeast

106. US



107.

BOMBYCOIDE- Buck and Io Moths

Io Moth (*Automeris io*)



44.

Wingspan: 50-80 mm. Males yellow.

Host plants: Generalist. Various woody plants

Range: Eastern two-thirds of U.S.



45.

Polyphemus Moth (*Antheraea polyphemus*)



88.

Wingspan: 100-150 mm

Host plants: Generalist. Broad-leaved trees and shrubs

Range: Southern U.S



89.

PYRALOIDEA -Crambid Snout Moths

TENT CATEPILLARS AND LAPPET MOTHS

BOMBYCOIDE- Giant Silkworms

BOMBYCOIDE- Royal Moths

Consular Oak Worm (*Anisota consularis*)



13.

Wingspan: 32-66 mm; female larger than male

Host plants: Oaks

Range: Coastal Georgia south through Florida, west along the Gulf Coast to Louisiana.



14.

Royal Walnut Moth (*Citheronia regalis*)



56.

Wingspan: 50-80 mm

Hostplants: Generalist: Various woody plants

Range: Eastern two-thirds of U.S.



57.

BOMBYCOIDE- Royal Moths

Imperial Moth (*Eacles imperialis*)



42.

Wingspan: 80-174 mm; female larger than male

Host plants: Generalist: Broadleaf trees and shrubs.

Range: Eastern U.S., Ontario, Quebec



43.

Tantulus Sphinx Moth (*Aellopos tantalus*)



4.

Wingspan: 45-57 mm

Host plants: Rubiaceae esp. Seven year apple (*Casasia clusiifolia*)

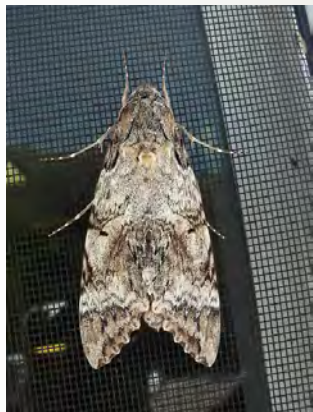
Range: FL, MI, NY



5.

BOMBYCOIDE- Sphinx Moths

Tetrio Sphinx (*Pseudosphinx tetrio*)



91.

Wingspan: 127-140 mm

Host plants: Plants in Apocynaceae family esp. Frangipani (*Plumeria*)

Range: FL, LA, TX, Caribbean



92.

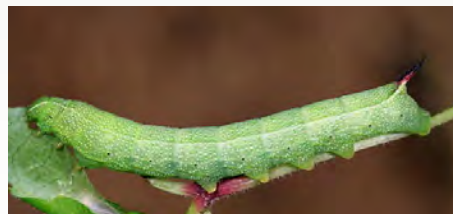
Nessus Sphinx (*Amphion floridensis*)



Wingspan: 37-55 mm

Host plants: *Ampelopsis*, grape, and cayenne pepper

Range: Widespread (Eastern North America)



94.

BOMBYCOIDE- Royal Moths

BOMBYCOIDE- Sphinx Moths

BOMBYCOIDE- Sphinx Moths

BOMBYCOIDE- Sphinx Moths

Virginia Creeper Sphinx (*Darapsa myron*)



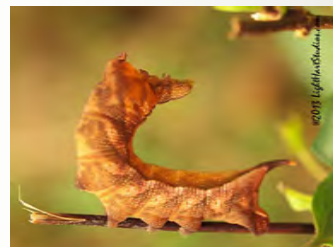
Wingspan: 45-65 mm

Host plants:

Peppervine, *Viburnum*, grape, and Virginia Creeper

Range: Eastern and central North America

95.



96.

Pluto Sphinx (*Xylophanes pluto*)



Wingspan: 53-65 mm

Host plants: Firebush (*Hamelia* spp.), Snow-berry (*Chiococca* spp.), *Erythroxylon* spp.

Range: Cent. Am. MX,

108.



109.

BOMBYCOIDE- Sphinx Moths

Ello Sphinx (*Erinnyis ello*)



19.

Wingspan: 75-85 mm

Host plants:

Euphorbiaceae, Myrtaceae, Sapotaceae in FL

Range: Southern Canada, CA, FL, TX



20.

Gaudy Sphinx Moth (*Eumorpha labruscae*)



29.

Wingspan: 108-112 mm

Host plants: Grapes, Possum grape (*Cissus* spp.)

Range: Widespread (TX- Puerto Rico)



30.

BOMBYCOIDE- Sphinx Moths

Modest Sphinx (*Pachysphinx modesta*)



68

Wingspan: 76-120 mm

Host plants:

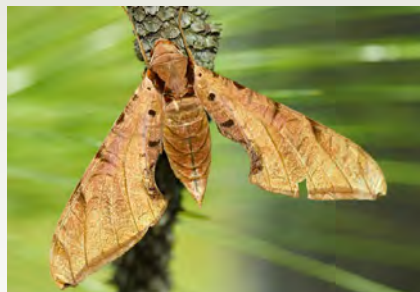
Salicaceae, willows in S. FL

Range: Widespread in North America



69.

Streaked Sphinx (*Protambulyx strigilis*)



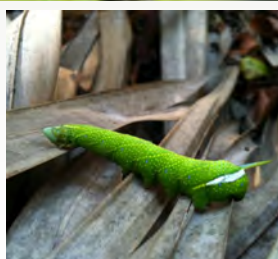
72.

Wingspan: 108-130 mm

Host plants:

Anacardiaceae esp. Brazilian Pepper

Range: FL-TX, and New World tropics



73.

BOMBYCOIDE- Sphinx Moths

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BOMBYCOIDE - Sphinx Moths

Rustic Sphinx (*Manduca rustica*)



58.

Wingspan: 87-150mm

Host plants: Generalist

Range: ME to TX and

FL, Southwestern U.S., West Indies, Mexico to Argentina.



59.

Laurel Sphinx (*Sphinx kalmiae*)



66.

Wingspan: 75-103 mm

Host plant: Ash, fringe-tree, lilac, privet, and plants in the Oleaceae. Likely *Ligustrum* (privet) and *Fraxinus* (pop-ash) in S. FL.

Range: Eastern North America



67.

GEOMETRID MOTHS

GEOMETRID MOTHS

Avocado Spanworm (*Epimecis detexta*)



8.

Host plants: Avocado

Range: Caribbean/ Gulf Coast (FL-DR)

White-Tipped Black Moth (*Melanchroia chephise*)



80.

Wingspan: 30-35 mm

Host plants: Generalist

Range: Florida, southern Great Plains, south to Paraguay, West Indies



81.

GEOMETRID MOTHS

OWLET MOTHS AND KIN - Prominent Moths

Southern Emerald (*Synchlora frondaria*)



62.

Wingspan: 15 mm

Host plants: Generalists (sunflower, Bidens, Rudbeckia)

Range: Southern USA, Central and South America; Greater & Lesser Antilles



63.

Heterocampa astarte



37.

Range: FL, NC, SC



38.

OWLET MOTHS AND KIN – Nolid Moths

Hieroglyphic Moth (*Diphthera festiva*)



39.

Wingspan: 37-48 mm

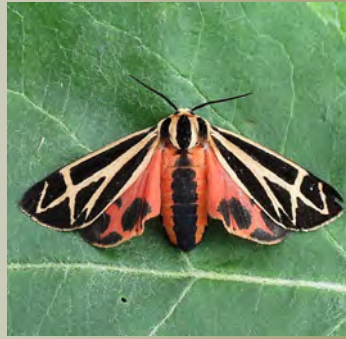
Host plants: Generalist

Range: AZ, TX-FL-NC, West Indies, Mexico- South America



40.

Harnessed Tiger (*Apantesis phalerata*)



74.

Wingspan: 30-42 mm

Host plants: clover, cord grass (*Spartina* spp.), corn, dandelion, plantain

Range: Ontario, Quebec, and Maine to Florida, west to Texas, north to South Dakota



75.

OWLET MOTHS AND KIN – Tiger Moths

Edward's Wasp (*Lymire edwardsii*)



86.

Wingspan: 30-40 mm

Host plants: Figs (*Ficus* spp.)

Range: FL, GA, AZ



87.

Oleander Moth (*Syntomeida epilais*)



48.

Wingspan: 43 mm

Host plants: Several Apocynaceae, esp. Oleander

Range: MS, FL, SC, TX



49.

OWLET MOTHS AND KIN – Tiger Moths

Yellow Banded Wasp Moth (*Syntomeida ipomoeae*)



Wingspan: 43 mm

Host plants: Convolvulaceae esp. Morning Glory (*Ipomoea* spp.)

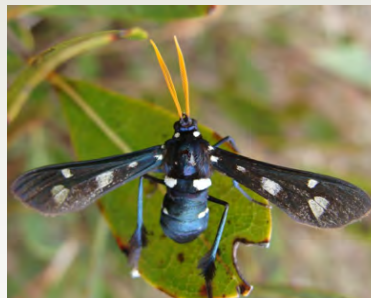
Range: FL, GA

82.



83.

Lesser Wasp Moth (*Pseudocharis minima*)



46.

Wingspan: 30-35 mm

Host plants: *Crossopetalum* spp.

Range: S FL mainland and the Keys (endemic)



47.

OWLET MOTHS AND KIN – Tiger Moths

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OWLET MOTHS AND KIN – Tiger Moths

Faithful Beauty (*Composia fidelissima*)



21.

Wingspan: 48-64 mm

Host plants: Multiple Apocynaceae and Fabaceae (Peas)

Range: West Indies, FL



22.

Florida Tussock (*Halysidota cinctipes*)



27.

28. **Host plants:** Florida Trema (*Trema micrantha*)

Range: Caribbean, AZ, CA, FL, TX



OWLET MOTHS AND KIN – Tiger Moths

Echo Moth (*Seirarctia echo*)



17.

Host plants: Coontie, Cabbage Palmetto, Crotons, Lupine, Oaks, Persimmon, other woody plants

Range: FL, GA



18.

Virginia Tiger Moth (*Spilosoma virginica*)



78.

Wingspan: 32-52 mm

Host plants: Generalist (low-growing plants, woody shrubs, trees)

Range: Widespread in North America

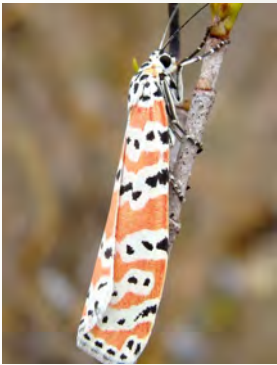


79.



OWLET MOTHS AND KIN – Tiger Moths

Rattlebox Moth (*Utetheisa ornatix*)



52.

Wingspan: 30-45 mm

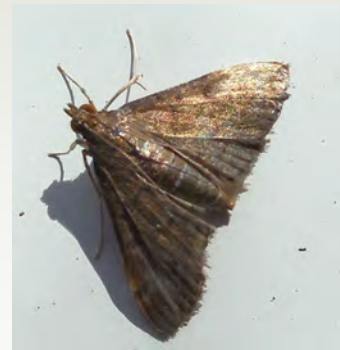
Host plants: Rattlebox, bush-clover, elm, cherry, fireweed, lupine, sweet gale

Range: Widespread Eastern U.S, Central America, Northern South America



53.

Bronzy Macrochilo



76.

Wingspan: 19-23 mm

Range: Southern U.S (AZ-FL)



77.

OWLET MOTHS AND KIN – Tiger Moths

OWLET MOTHS AND KIN – Tiger Moths

OWLET MOTHS AND KIN - Litter Moths

OWLET MOTHS AND KIN – Fruit-Piercing Moths

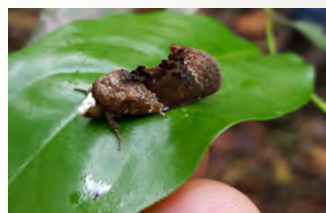
Gonodonta bidens



33.

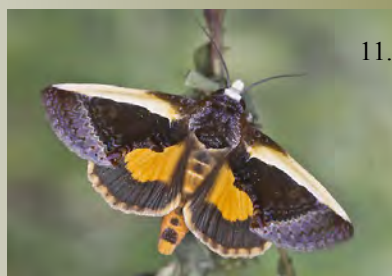
Wingspan: 48-64 mm

Range: FL, TX



34.

Citrus Fruit Piercer (*Gonodonta nutrix*)



11.

Wingspan: 36-40 mm

Host plants: Pond apple, American Brunfelsia, and tomatoes

Range: Tropical, FL, Mexico-Paraguay



12.

OWLET MOTHS AND KIN – Boletobiinae

Ernestine's Moth (*Phytometra ernestinana*)



90.

Range: Widespread (AZ-FL-ON-IA, W. Indies)

Black Witch (*Ascalapha odorata*)

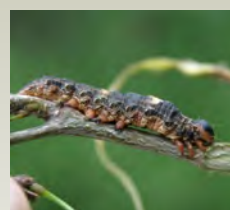


9.

Wingspan: 90-150 mm

Host plants: Many Fabaceae (Peas)

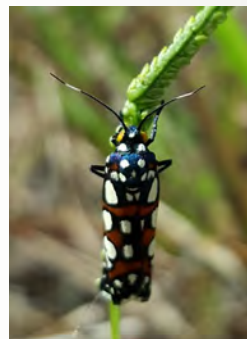
Range: Caribbean, South America, Canada, Mexico, FL, HI



10.

OWLET MOTHS AND KIN – Owlet Moths

Regal Cydosa (*Cydosa nobilitella*)

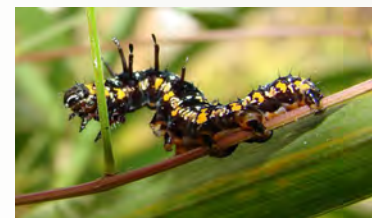


54.

Wingspan: < 20 mm.

Host plants: West Indian pinkroot

Range: Southern U.S., Argentina, Antilles



55.

Florida Fern Moth (*Callopietria floridensis*)



23.

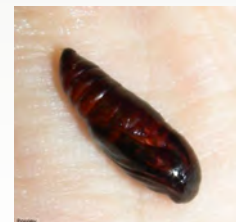
Wingspan: 25-30 mm

Host plants: Most Fern Species

Range: Mexico-South America. SC-FL, AR-TX



24.



OWLET MOTHS AND KIN – Fruit-Piercing Moths

OWLET MOTHS AND KIN – Eribiinae

OWLET MOTHS AND KIN – Owlet Moths

Velvet Armyworm (*Spodoptera latifascia*)



70.

Wingspan: 42 mm

Host plants: Generalist

Range: Southern U.S.–
Central America



71.

Armyworm (*Spodoptera ornithogalli*)



Wingspan: 32-44 mm

Host plants: Generalist

Range: Widespread
(CA-Brazil)



6.

7.

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