

# NATIVE Caterpillars Moths and Butterflies and host NATIVE Woodies



Double-toothed Prominent



Honey locust Moth caterpillar



Hackberry Emperor larva PHOTO: Douglas Tallamy



Hackberry Emperor  
PHOTO: Megan McCarty



Big Poplar Sphinx



In a study published in 2009, Dr. Douglas W. Tallamy, Ph.D, chair of the Department of Entomology and Wildlife Ecology at the University of Delaware specifically addressed the usefulness of native woodies as host plants for our native caterpillars (and obviously therefore moths and butterflies).

We present here a partial list, and the number of Lepidopteran species that rely on them. Please note that two genera (Rhamnus and Frangula) are marked \*\*. Both have species commonly named 'buckthorn'. In fact, both genera have more native than non-native buckthorns.

Keep this list in mind as you think about replacing the ash trees that have succumbed to the emerald ash borer. <http://plants.usda.gov/> is an excellent site to check-out any uncertainties.

## Number of species of Caterpillars

Oaks (Quercus)	557	Beeches (Fagus)	127	Honey-locusts (Gleditsia)	46	Magnolias (Magnolia)	21
Cherries (Prunus)	456	Serviceberry (Amelanchier)	124	New Jersey Tea (Ceanothus)	45	Buttonbush (Cephalanthus)	19
Willows (Salix)	455	Larches or Tamaracks (Larix)	121	Sycamores (Platanus)	45	Redbuds (Cercis)	19
Birches (Betula)	411	Dogwoods (Cornus)	118	Huckleberry (Gaylussacia)	44	Green-briar (Smilax)	19
Poplars (Populus)	367	Firs (Abies)	117	Hackberry (Celtis)	43	Wisterias (Wisteria)	19
Crabapples (Malus)	308	Bayberries (Myrica)	108	Junipers (Juniperus)	42	Redbay (native) (Persea)	18
Maples (Acer)	297	Viburnums (Viburnum)	104	Elders (Sambucus)	42	Bearberry (Arctostaphylos)	17
Blueberries (Vaccinium)	294	Currants (Ribes)	99	Ninebark (Physocarpus)	41	Bald cypresses (Taxodium)	16
Alders (Alnus)	255	Hop Hornbeam (Ostrya)	94	Lilacs (Syringa)	40	Leatherleaf (Chamaedaphne)	15
Hickories (Carya)	235	Hemlocks (Tsuga)	92	Hollies (Ilex)	39	Poison Ivy (Toxicodendron)	15
Elms (Ulmus)	215	Spireas (Spiraea)	89	Sassafras (Sassafras)	38	Sourwood (Oxydendrum)	14
Pines (Pinus)	201	Grapes (Vitis)	79	Honeysuckles (Lonicera)	37	Pepper vine (Ampelopsis)	13
Hawthorns (Crataegus)	168	Douglas-fir (Pseudotsuga)	76	Sweet-gums (Liquidambar)	35	Madrone (Arbutus)	12
Berries (Rubus)	163	Locusts (Robinia)	72	Mountain-laurel (Kalmia)	33	Pawpaw (Asimina)	12
Spruces (Picea)	150	Hornbeams (Carpinus)	68	Buckeyes (Aesculus)	33	Colorado Barberry (Berberis)	12
Ashes (Fraxinus)	149	Mountain ashes (Sorbus)	68	Virginia Creeper (Parthenocissus)	32	Prairie Acacia (Acacia)	11
Linden or Basswood (Tilia)	149	Sweetfern (Comptonia)	64	Red and Black Chokeberries (Photinia)	29	Euonymus (Euonymus)	11
Pears (Pyrus)	138	Witch-hazels (Hamamelis)	63	Black Gums or Tupelo (Nyssa)	26	Buckthorn** (Frangula)	11
Roses (Rosa)	135	Sumacs (Rhus)	58	Snowberries (Symphoricarpos)	25	Spicebush (Lindera)	11
Filberts (Corylus)	131	Rhododendrons (Rhododendron)	51	Buffalo-berries (Shepherdia)	22	Fetterbush (Lyonia)	11
Walnut (Juglans)	129	Arborvitae (Thuja)	50	Tulip-trees (Liriodendron)	21	Summersweet (Clethra)	10
Chestnuts (Castanea)	127	Persimmons (Diospyros)	46			Buckthorns** (Rhamnus)	10

Double-toothed Prominent (*Nerice bidentata*) larvae feed exclusively on elms (*Ulmus*), and can be found June through October. Their body shape mimics the toothed shape of American elm, making them hard to spot. The adult moth is small with a wingspan of 3-4 cm.

Honey locust caterpillar feeds on honey locust, and Kentucky coffee trees.

*Asterocampa celtis*, the Hackberry Emperor caterpillar, feeds exclusively on Hackberry (*Celtis*) species. Cats overwinter in groups, inside rolled, dead leaves.

Big poplar sphinx larvae (*Pachysphinx occidentalis*) feed on poplars (*Populus*), and willows (*Salix*). The adult moth's wingspan is an impressive 13-15 cm. (5-6 inches).

Giant swallowtail (*Papilio cresphontes*) larvae feed on trees and herbs of the citrus family (*Rutaceae*), prickly ash, hop tree, and common rue. The adult is the largest butterfly in Canada and United States, with a wingspan of 10-16 cm. (3.9-6.3 inches).

Cecropia silkworm (*Hyalophora cecropia*) caterpillars feed in groups on various trees and shrubs including maples (*Acer*), wild cherries and plums (*Prunus*), apples (*Malus*), alder and birch (*Betulaceae*), dogwoods (*Cornus*), and willows (*Salix*). Adult moths do not feed. They have a wingspan of 11-15 cm.



Giant Swallowtail larva defensive red horns extended



Giant Swallowtail PHOTO: Christer Johansson



Cecropia caterpillar



Cecropia newly emerged male PHOTO: Charles Benjamin Schwamb