Overwintering Strategies of Butterflies in Howard County

	Egg	Caterpillar	chrysalis	Adult	Some may O/W as adult	Unknown	Migrant	Introduced on vegetation	This table represents our best understanding of the overwintering strategies of the 80 species of butterflies seen during the butterfly survey. The results come from butterfly field guides, internet searches, and, importantly, the data from the survey itself. Notes are added to those species where the results were not as clear cut giving the rationale for the choice.
Silver-spotted Skipper			х				v		
Long-tailed Skipper		v					х		
Southern Cloudywing		X		<u> </u>					
Northern Cloudywing		X X							
Hayhurst's Scallopwing		x							
Juvenal's Duskywing Horace's Duskywing		x x	-	<u> </u>					
		x x		<u> </u>	<u> </u>				
Wild Indigo Duskywing Common Checkered-Skipper		^					x		Overwinter in south as a caterpillar. Two references say that it cannot survive the winter north of the 40th parallel. Another says that it does survive in western New York. Early date in eight year survey is May 9th. Not enough evidence that this species overwinters in Howard County.
Common Sootywing		х							
Swarthy Skipper		Х							
Clouded Skipper							Х		
Least Skipper		Х							
Fiery Skipper							Х		
Peck's Skipper		Х	x						
Tawny-edged Skipper			х						
Crossline Skipper		Х							
Southern Broken Dash							х		Little information on this species. Overwinters in the south as a caterpillar. Early date is June 7th. Believe that this is a migrant in Howard County.
Northern Broken-Dash		х							
Little Glassywing		х							
Sachem							х		
Mulbery wing						х			
Hobomok Skipper		х							
Zabulon Skipper		х							
Broad-winged Skipper		х							
Dun Skipper		Х							
Dusted Skipper		Х							
Ocola Skipper							Х		
Brazilian Skipper								x	Only one adult and 10 caterpillars seen in the eight years of the survey. Caterpillars believed to be from plants sourced from southern nurseries that year. No evidence of overwintering in Howard County.
Pipevine Swallowtail			x	-	-				
Zebra Swallowtail			x	-	-				
Black Swallowtail			x						
Giant Swallowtail							х		Migrant. Not seen every year. Only 19 have been seen in eight years. Early date is Aug 27th. Don't believe this species overwinters in Ho Co.
Eastern Tiger Swallowtail			х						
Spicebush Swallowtail			х						
Checkered White							х		Sporadic migrant in usually June - August. Overwinters as a chrysalis down south. Have seen only three during the survey. Early date is Sept 12th.
Cabbage White			х						
Falcate Orangetip			х	L					
Clouded Sulphur		х	х						

One of Calaban		v		1	v	гт			Come everywinter in estamillar store, come in the shrupplic store. We also believe that some
Orange Sulphur		X	X		х				Some overwinter in caterpillar stage, some in the chrysalis stage. We also believe that some may overwinter as an adult since the survey has a late date of Dec 27th and an early date of
									Feb 25th.
Cloudless Sulphur			-			┝─┤	х		Migrate north in late spring and south in late fall. No evidence of overwintering in the county.
							~		Early date is May 29th. Overwinters as an adult in the south.
Little Yellow						┝─┤	х		Infrequent migrant from south. Have seen nine total in eight years in survey. Early date is
									August 31st. Overwinters as an adult in reproductive diapause further south.
Sleepy Orange					х		х		· · · · · · · · · · · · · · · · · · ·
Dainty Sulphur							х	x	Infrequest migrant (2012). Kathy Litzinger found large number on newly planted vegetation
									(presumably with eggs) at PVSP in 2018.
Harvester			x						All references that select an overwintering stage say chrysalis. "Butterflies of Mid-Atlantic"
									says uncertain. Early date is June 8th.
American Copper		х	х						Most references say chrysalis. BugGuide and "Butterflies of the Mid-Atlantic" says caterpillar.
									Early date is April 18th.
Bronze Copper	Х								
Coral Hairstreak	Х								
Banded Hairstreak	Х								
Red-banded Hairstreak		х	х						References split between caterpillar and chrysalis. Early date is April 29th.
Juniper Hairstreak			х						
Eastern Pine Elfin			х						
White M Hairstreak			х						
Gray Hairstreak			x						
Eastern Tailed-Blue		х							
Spring Azure			x						
Summer Azure			x						
Henry's Elfin			x						
			<u>^</u>						
American Snout					х		х		Most overwinter in the south as adults however, in mild winters, can overwinter as far north as New York. Kathy Litzinger's early date sighting on March 24th was probably an adult that overwintered in Howard County.
Variegated Fritillary					х		х		Most adults fly south to overwinter. John McKitterick did find a very worn adult that
									overwintered in Howard County on Feb 17th.
Great Spangled Fritillary		х							
Meadow Fritillary		х							
Silvery Checkerspot		х							
Pearl Crescent		х							
Question Mark				х			Х		
Eastern Comma				х					
Mourning Cloak				х					
American Lady					х		х		More freeze tolerant than Painted Lady. Can survive most winters in Md. Some migration probable. Overwinters as adult.
Painted Lady							Х		
Red Admiral							Х		
Common Buckeye							Х		
Red-spotted Purple		х							
Viceroy		х							
Hackberry Emperor		х							
Tawny Emperor		х							
, <u>, , , , , , , , , , , , , , , , , , </u>									
Northern Pearly-eye		х							
		x				┝─┤			
Annalachian Brown		<u> </u>							
Appalachian Brown		X							
Little Wood-Satyr		X X				$\left \right $			
		X X							