	A	В	С	D	E	F	G	Н	L	р	Т	
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description		Actions	Working
											Habitat protection is essential, so cooperation and education of land owners should be high priority.	
										<i>"</i>	(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential	()	
										buildings in agricultural areas, cottages, vacation homes		
										near water bodies, ecotourism lodges, fishing resorts,		
									Low-Density Housing	backcountry ski lodges. / /		
2	Paectes abrostolella	(no common name)	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands	1.1.2	Areas / /			
											Habitat protection is essential, so cooperation and	
										<i>"</i>	education of land owners should be high priority.	
											(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential		
										buildings in agricultural areas, cottages, vacation homes		
							Riparian and Floodplains,		Low-Density Housing	near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //		
з	Argillophora furcilla	A cane moth	Terrestrial Insect	Lepidoptera	ш	с	Non-tidal Wetlands	1.1.2	Areas / /	backcountry skilouges. 77		
		A cane moun	Tenesthatmiseet	Lepidopteid			Non tidat Wettands	1.1.2	Alcus / /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
											education of land owners should be high priority.	
										,, I S S	(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential		
										buildings in agricultural areas, cottages, vacation homes		
										near water bodies, ecotourism lodges, fishing resorts,		
							Riparian and Floodplains,		Low-Density Housing	backcountry ski lodges. / /		
4	Franclemontia interrogans	A cane moth	Terrestrial Insect	Lepidoptera	Ш	С	Non-tidal Wetlands	1.1.2	Areas / /			
											Habitat protection is essential, so cooperation and	
											education of land owners should be high priority.	
											(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes		
										near water bodies, ecotourism lodges, fishing resorts,		
									Low-Density Housing	backcountry ski lodges. / /		
5	Pseudanophthalmus gracilis	A cave beetle	Terrestrial Insect	Coleoptera	П	с	Caves and Karst	1.1.2	Areas / /			
				· ·						Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	
										continue to some extent. This type of development is seen	(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential		
										buildings in agricultural areas, cottages, vacation homes		
									Low Density Housing	near water bodies, ecotourism lodges, fishing resorts,		
6	Pseudanophthalmus pusio	A cave beetle	Terrestrial Insect	Coleoptera	п	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	backcountry ski lodges. / /		
0			Tenesthatmiseet	Coleoptera		C		1.1.2		Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
										Extensive development diatio residential (instaaling	education of land owners should be high priority.	
											(1.1.2), Limit use of pesticides, especially neonicotinoid	s,
											near populations of all bees (9.3.3)	
										buildings in agricultural areas, cottages, vacation homes		
										near water bodies, ecotourism lodges, fishing resorts,		
							Creeks and Rivers, Large			backcountry ski lodges. / Includes the use of inputs for		
							Rivers, Tidal Creeks and		Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,		
_	O-Watan alliatur	A sellenhens has	To man at what has a set				Rivers, Large Tidal Rivers,		Areas / Herbicides and	fungicides. /		
/	Colletes ciliatus	A cellophane bee	Terrestrial Insect	Ins-Hymenoptera		С	Nontidal Rivers	1.1.2, 9.3.3,	Pesticides /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
											education of land owners should be high priority.	
										······	(1.1.2)	
										particularly in rural and agroforestry areas. E.g., residential		
										buildings in agricultural areas, cottages, vacation homes		
										near water bodies, ecotourism lodges, fishing resorts,		
									Low-Density Housing	backcountry ski lodges. / /		
		a dung bootlo	Terrestrial Insect	Coleoptera	Ш	с	Glades and Barrens	1.1.2	Areas / /			
8	Phanaeus igneus	a dung beetle									Habitat protection is essential, so cooperation and	
8	Phanaeus igneus	a dung beene						1		resorts), where the spacing allows ecological functions to	a du a state de la sel a conserva a la sub a la la la la sel a state.	1
8	Phanaeus igneus										education of land owners should be high priority.	
8	Phanaeus igneus									continue to some extent. This type of development is seen	(1.1.2)	
8	Phanaeus igneus									continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential		
8	Phanaeus igneus									continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes		
8	Phanaeus igneus								Low-Density Housing	continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential		

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ncluding al functions to opment is seen	Actions Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)	Working_Lands	Notes
ppment is seen E.g., residential cation homes ng resorts,	(1-1-2)		
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		cane (Arundinaria) specialist
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		cane (Arundinaria) specialist
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		
ncluding al functions to ppment is seen E.g., residential cation homes ng resorts, of inputs for ecticides,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Limit use of pesticides, especially neonicotinoids, near populations of all bees (9.3.3)		Dodder specialist
ncluding al functions to ppment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		

	A	В	С	D	E	F	G	Н	L	Р	Т
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
10		A Geometrial Math	Terrostrial lagost				Facada and Weedlands		Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so coop education of land owners should be hig (1.1.2)
10	Idaea tacturata	A Geometrid Moth	Terrestrial Insect	Lepidoptera	IV	С	Forests and Woodlands	1.1.2	Areas / /	Extensive development that is residential (including	Habitat protection is essential, so coop
11	Lytrosis permagnaria	A geometrid moth	Terrestrial Insect	Lepidoptera	111	C	Forests and Woodlands	1.1.2, 5.3.1,	Low-Density Housing Areas / Complete Removal of the Forest Cover /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Cutting removing the majority of the forest cover. E.g., clear-cutting and related cuts (CT, CRS, CPRS, CPHRS, CPPTM). /	education of land owners should be hig (1.1.2), Complete removal of forest hal would render the habitat non-viable for species.(5.3.1)
12	Xanthorhoe iduata	A Geometrid Moth	Terrestrial Insect	Lepidoptera	111	C	Forests and Woodlands	1.1.2, 11.1.1,	Low-Density Housing Areas / Changes in Vegetation Communities /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	Habitat protection is essential, so coop education of land owners should be hig (1.1.2), High elevation species that may to rising temperatures from climate cha
	Megachile integra	A leafcutter bee	Terrestrial Insect	Ins-Hymenoptera		C	Forests and Woodlands	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hij (1.1.2), Limit use of pesticides, especial near populations of all bees (9.3.3)
	Megachile rugifrons	A leafcutter bee	Terrestrial Insect	Ins-Hymenoptera		C	n/a	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hig (1.1.2), Limit use of pesticides, especial near populations of all bees (9.3.3)
	Osmia illinoensis	A mason bee	Terrestrial Insect	Ins-Hymenoptera		c	Forests and Woodlands, Glades and Barrens	1.1.2, 9.3.3, 4.2.1	Low-Density Housing Areas / Herbicides and Pesticides / Power and Service Lines	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. / Networks of buildings, towers, pylons and poles that are associated with electricity distribution and telecommunications, excluding hydroelectric dams of power plants (Threat 3.3.1). The scope of rights-of-way may vary according to their size.	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especial near populations of all bees (9.3.3)

Т	U	V
	Working_Lands	Notes
ction is essential, so cooperation and		
and owners should be high priority.		
ction is essential, so cooperation and		
and owners should be high priority.		
ete removal of forest habitat for logging		
the habitat non-viable for this		
)		
ction is essential, so cooperation and and owners should be high priority.		
levation species that may be susceptible		
eratures from climate change. (11.1.1)		
ction is essential, so cooperation and		
and owners should be high priority.		
use of pesticides, especially neonicotinoids,		
ons of all bees (9.3.3)		
ction is essential, so cooperation and and owners should be high priority.		
use of pesticides, especially neonicotinoids,		
ons of all bees (9.3.3)		
ction is essential, so cooperation and		
and owners should be high priority. use of pesticides, especially neonicotinoids,		
ons of all bees (9.3.3)		
	1	

A	В	C	D	E	F G	Н	L	Р	Т	U	V
1 Scientific_Name	Common_Name	Grouping	Туре	Tier C	OR Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
								continue to some extent. This type of development is seen	(1.1.2), High elevation species that may be susceptible		
								particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.1)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Major changes in an ecosystem			
								resulting in changes to vegetation communities			
								distinguished from natural vegetation succession, which			
								may threaten open-country species (Threat 7.3.2). E.g.,			
								migration of deciduous trees towards the boreal forest,			
								rising sea levels, desertification, thawing permafrost (in			
							Low-Density Housing	tundra), coral bleaching. /			
							Areas / Changes in	,, 0			
6 Aplectoides condita	A Noctuid Moth	Terrestrial Insect	Lepidoptera	III c	Forests and Woodlands	1.1.2, 11.1.1,	Vegetation Communities /				
	ANOCIAIGTION	Terrestriatiniseet	Lepidoptera			1.1.2, 11.1.1,	Vegetation Communities/	Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
								continue to some extent. This type of development is seen	(1.1.2)		
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
							Low-Density Housing	backcountry ski lodges. //			
17 Dichagyris grotei	A Noctuid Moth	Terrestrial Insect	Lepidoptera		Glades and Barrens	1.1.2	Areas / /	Successifier Skilouges. 7 7			
17 Dichagyris grotei		TETTESUIALIIISEUL	Lehinohielg	III c		1.1.2		Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								Extensive development that is residential (including			
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
									(1.1.2), Periodic fires or moving may be needed to		
								particularly in rural and agroforestry areas. E.g., residential	retard woody succession (7.3.2)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Natural vegetation succession			
							Low-Donsity Housing				
							Low-Density Housing	causing habitat loss for species of early successional			
							Areas / Vegetation	habitats. /			
18 Meropleon titan	A noctuid moth	Terrestrial Insect	Lepidoptera	III c	Forests and Woodlands	1.1.2, 7.3.2,	Succession /				
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
								continue to some extent. This type of development is seen			
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
							Low-Density Housing	backcountry ski lodges. / /			
19 Ceratocanthus aeneus	a pill scarab	Terrestrial Insect	Coleoptera	IV a	Caves and Karst	1.1.2	Areas / /				
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
									(1.1.2)Pitcher plant bogs decline with progressing		
								particularly in rural and agroforestry areas. E.g., residential			
									open (fire, woody vegetation removal, etc.) (7.3.2)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Natural vegetation succession			
							Low-Density Housing	causing habitat loss for species of early successional			
Sacrophaga sarraceniae or a							Areas / Vegetation	habitats. /			
20 species of Fletcherimyia	A pitcher plant flesh fly	Terrestrial Insect	Diptera	II a	Non-tidal Wetlands	1.1.2, 7.3.2,	Succession /				
	, planticontry					,,		Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
								continue to some extent. This type of development is seen			
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
					Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. / /			
21 Heterocampa astarte	A Prominent Moth	Terrestrial Insect	Lepidoptera	IV c	Beaches and Dunes	1.1.2	Areas / /	,			
			200.00010					Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
								continue to some extent. This type of development is seen			
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
							Low-Density Housing				
							Low-Density Housing	backcountry ski lodges. / /			
22 Arianops jeanneli	A snort-winged mold be	etle Terrestrial Insect	Coleoptera	I c	Caves and Karst	1.1.2	Areas / /				

	Α	В	С	D	E	F	G	Н		P	
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
							Non-tidal Wetlands, Tidal			buildings in agricultural areas, cottages, vacation homes	
							Wetlands, Tidal Creeks			near water bodies, ecotourism lodges, fishing resorts,	
							and Rivers, Large Tidal		Low-Density Housing	backcountry ski lodges. / /	
3	Poanes aaroni	Aaron's Skipper	Terrestrial Insect	Lepidoptera	IV	с	Rivers	1.1.2	Areas / /		
										Extensive development that is residential (including	Habitat protection is esse
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Limit use of pestic
										particularly in rural and agroforestry areas. E.g., residential	near populations of all be
							Forests and Woodlands,			buildings in agricultural areas, cottages, vacation homes	
							Grasslands, Shrublands,			near water bodies, ecotourism lodges, fishing resorts,	
							Savannas, Glades and			backcountry ski lodges. / Includes the use of inputs for	
							Barrens, Urban Lands,		Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
							Transportation Networks,		Areas / Herbicides and	fungicides. /	
<u>2</u> 4	Bombus pensylvanicus	American bumble bee	Terrestrial Insect	Ins-Hymenoptera	IV	а	Croplands, Orchards	1.1.2, 9.3.3,	Pesticides /		
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Limit use of pestic
										particularly in rural and agroforestry areas. E.g., residential	near populations of all be
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Includes the use of inputs for	
									Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
							Shrublands, Savannas,		Areas / Herbicides and	fungicides. /	
25	Andrena fulvipennis	An andrenid bee	Terrestrial Insect	Ins-Hymenoptera	IV	с	Beaches and Dunes	1.1.2, 9.3.3,	Pesticides /		
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Limit use of pestic
										particularly in rural and agroforestry areas. E.g., residential	near populations of all be
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Includes the use of inputs for	
									Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
									Areas / Herbicides and	fungicides. /	
26	Aphaenogaster floridana	An ant	Terrestrial Insect	Ins-Hymenoptera	IV	а	Savannas	1.1.2, 9.3.3,	Pesticides /		
_0		Ananc	Terrestriatiniseet			u	ouvannas	1.1.2, 5.6.6,	i concideo /	Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Limit use of pestici
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Includes the use of inputs for	
									Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
							Savannas, Beaches and		Areas / Herbicides and	fungicides. /	
27	Monomorium viridum	An ant	Terrestrial Insect	Ins-Hymenoptera	III	а	Dunes	1.1.2, 9.3.3,	Pesticides /		
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
									Low-Density Housing	backcountry ski lodges. / /	
28	Celastrina neglectamajor	Appalachian azure	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands	1.1.2	Areas / /		
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Periodic fires or me
										particularly in rural and agroforestry areas. E.g., residential	retard woody succession (
										buildings in agricultural areas, cottages, vacation homes	spectrum insecticides to co
										near water bodies, ecotourism lodges, fishing resorts,	inhabited by this skipper;
										backcountry ski lodges. / Natural vegetation succession	specific control measures
									Low Donsity Housing	causing habitat loss for species of early successional	
									Low-Density Housing	habitats. / Includes the use of inputs for controlling crop	
							Ferente carditita II - I		Areas / Vegetation	pests. E.g., herbicides, insecticides, fungicides.	
	L .						Forests and Woodlands,		Succession / Herbicides		
29	Pyrgus wyandot	Appalachian grizzled skip	per Terrestrial Insect	Lepidoptera	1	а	Glades and Barrens	1.1.2, 7.3.2, 9.3.3	and Pesticides		

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Т	U	V
	Working_Lands	Notes
ential, so cooperation and		
s should be high priority.		
s should be high phoney.		
ential, so cooperation and	Grassland	
rs should be high priority.	pastures,	
	shrubland	
ees (9.3.3)	pastures, savanna	
	pastures	
	puoturoo	
ential, so cooperation and		
s should be high priority.		
icides, especially neonicotinoids,		
ees (9.3.3)		
ential, so cooperation and		
rs should be high priority.		
icides, especially neonicotinoids,		
ees (9.3.3)		
antial as assumption and		
ential, so cooperation and		
rs should be high priority.		
icides, especially neonicotinoids,		
ees (9.3.3)		
ential, so cooperation and	Timbered forested	
rs should be high priority.	uplands	
ential, so cooperation and	Timbered forested	
s should be high priority.	uplands	
moving may be needed to		
n (7.3.2), Avoid using broad		
control spongy moths in areas		
; instead use spongy moth-		
s (9.3.3)		

A	В	С	D	E	F G	н	L	P	Т	U	V
1 Scientific_Name	Common_Name	Grouping	Туре	Tier CC	OR Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
								continue to some extent. This type of development is seen	(1.1.2)		
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
					Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. //			
30 Papaipema araliae	Aralia shoot borer moth	Terrestrial Insect	Lepidoptera	III c	Shrublands	1.1.2	Areas / /	buckeountry skilouges. 77			
	Ardia shoot borer mour	Terrestilatiliseet	Lepidoptera		onrublands	1.1.2	Alcus / /	/ Extensive development that is residential (including	Need to control emeral ash borer which is killing the	Timbered forested	
									primary larval hostplant (ash trees) of this moth (8.1.1),		
								continue to some extent. This type of development is seen	Habitat protection is essential so cooperation and	upianus	
								continue to some extent. This type of development is seen	education of land owners should be high priority		
								particularly in rural and agroforestry areas. E.g., residential			
									(1.1.2)		
								near water bodies, ecotourism lodges, fishing resorts,			
							Terrestrial Animals / Low-	backcountry ski lodges. /			
31 Papaipema furcata	Ash borer moth	Terrestrial Insect	Lepidoptera	III c	Forests and Woodlands	8.1.1, 1.1.2,	Density Housing Areas /				
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		Nest parasite of Bombus affinis, so fate related
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		to its host
								continue to some extent. This type of development is seen	(1.1.2), Limit use of pesticides, especially neonicotinoids	,	
								particularly in rural and agroforestry areas. E.g., residential	near populations of all bees (9.3.3) Rangewide decline		
								buildings in agricultural areas, cottages, vacation homes	may be due to a pathogen (8.4)		
									.,		
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Includes the use of inputs for			
							Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,			
							Areas / Herbicides and	fungicides. /			
32 Bombus bohemicus	Ashton cuckoo bumble bee	e Terrestrial Insect	Ins-Hymenoptera	l c	Forests and Woodlands	1.1.2, 9.3.3,	Pesticides /				
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
								continue to some extent. This type of development is seen	(1.1.2), High elevation species that may be susceptible		
								particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.1)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Major changes in an ecosystem			
								resulting in changes to vegetation communities			
								distinguished from natural vegetation succession, which			
								may threaten open-country species (Threat 7.3.2). E.g.,			
								migration of deciduous trees towards the boreal forest,			
								rising sea levels, desertification, thawing permafrost (in			
							Low-Density Housing	tundra), coral bleaching. /			
							Areas / Changes in				
22 Spoyoria atlantic	Atlantis fritillary	Terrestrial Insect	Lonidontoro	III c	Forests and Woodlands	1 1 0 11 1 1	Vegetation Communities /				
33 Speyeria atlantis	Attaintis intitudiy	Terrestriat insect	Lepidoptera		Forests and woodtands	1.1.2, 11.1.1,	vegetation Communities /	Enter al contente contrato de la constitución de la directoria.			
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
								continue to some extent. This type of development is seen	(1.1.2), Periodic fires or moving may be needed to		
								particularly in rural and agroforestry areas. E.g., residential	retard woody succession (7.3.2)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Natural vegetation succession			
							Low-Density Housing	causing habitat loss for species of early successional			
					Savannas, Glades and		Areas / Vegetation	habitats. /			
24 Durrhia auroptic re	Auroplaria aged bergy	Torroctrial Incast	Lonidontoro			110700	-	וומטונמנס. /			
34 Pyrrhia aurantiago	Aureolaria seed borer	Terrestrial Insect	Lepidoptera	ll c	Barrens	1.1.2, 7.3.2,	Succession /				
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
								continue to some extent. This type of development is seen	(1.1.2)		
								particularly in rural and agroforestry areas. E.g., residential			
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
							Low-Density Housing	backcountry ski lodges. //			
35 Pseudanophthalmus avernu	us Avernus cave beetle	Terrestrial Insect	Coleoptera		Caves and Karst	1.1.2	Areas / /	Successfully Skilouges. / /			
35 i seudanophunaunus avernu		TETTESTIALIIISECL	Coleopleia	ı C	σάνεο άπα και δι	1.1.2		Extensive development that is realidential (in shutter)	Habitat protection is assential as concentian as d	Crocoland	
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and	Grassland	
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	pastures,	
								continue to some extent. This type of development is seen	(1.1.2), Periodic Tires or moving may be needed to	shrubland pastures	
								particularly in rural and agroforestry areas. E.g., residential	retard woody succession (7.3.2)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Natural vegetation succession			
					Glades and Barrens,		Low-Donsity Housing				
							Low-Density Housing	causing habitat loss for species of early successional			
		Terrestrial Insect			Riparian and Floodplains,		Areas / Vegetation	habitats. /			
36 Euphydryas phaeton	Baltimore Checkerspot		Lepidoptera	IV c	Non-tidal Wetlands	1.1.2, 7.3.2,	Succession /				

Α	В	С	D	-	F G	Н	L	Р	Т	U	V	
1 Scientific_Name	Common_Name	Grouping	Туре	Tier CO	DR Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes	
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and			
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.			
								continue to some extent. This type of development is seen	(1.1.2), Occurs in barren habitats that need periodic fire			
								particularly in rural and agroforestry areas. E.g., residential	(7.1.2)			
								buildings in agricultural areas, cottages, vacation homes				
								near water bodies, ecotourism lodges, fishing resorts,				
								backcountry ski lodges. / Intervention aimed at preventing				
								and putting out forest fire (fire management). E.g., putting				
								out forest fires, controlled burning, creating firebreaks and				
							Low-Density Housing	trenches, and other measures. /				
					Forests and Woodlands,		Areas / Suppression in the					
Acronicta albarufa	Barrons dagger moth	Terrestrial Insect	Lepidoptera	III c	Glades and Barrens	1.1.2, 7.1.2,	Fire Regime /					
	Barrens dagger moth	Terrestriat insect	Lepidoptera		Glades and barrens	1.1.2, 7.1.2,	File Regille /	Extensive development that is residential (including	Habitat protection is assential, so cooperation and			
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and			
								resorts), where the spacing allows ecological functions to	(1.1.2) Occurs in borren bekitete thet need neriedie fine			
								continue to some extent. This type of development is seen	(1.1.2), Occurs in barren habitats that need periodic fire			
								particularly in rural and agroforestry areas. E.g., residential	(7.1.2)			
								buildings in agricultural areas, cottages, vacation homes				
								near water bodies, ecotourism lodges, fishing resorts,				
								backcountry ski lodges. / Intervention aimed at preventing				
								and putting out forest fire (fire management). E.g., putting				
								out forest fires, controlled burning, creating firebreaks and				
							Low-Density Housing	trenches, and other measures. /				
					Forests and Woodlands,		Areas / Suppression in the	denches, and other measures. 7				
Magazia avanazata	Derrone items	Terrestrial Incost	I and damage as			440740						
3 Macaria exonerata	Barrens itame	Terrestrial Insect	Lepidoptera	III c	Glades and Barrens	1.1.2, 7.1.2,	Fire Regime /					
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and			
								resorts), where the spacing allows ecological functions to				
								continue to some extent. This type of development is seen	(1.1.2)			
								particularly in rural and agroforestry areas. E.g., residential				
								buildings in agricultural areas, cottages, vacation homes				
								near water bodies, ecotourism lodges, fishing resorts,				
							Low-Density Housing	backcountry ski lodges. / /				
Properigea costa	Barrens moth	Terrestrial Insect	Lepidoptera	III b	Glades and Barrens	1.1.2	Areas / /	buckebunky skilouges. 77				
	Darrens mour	Terrestriat insect	Lepidoptera		Otades and Darrens	1.1.2	Aleas / /	Major changes in babitat composition or location	Susceptible to rising sea levels resulting from climate			
								Major changes in habitat composition or location /				
								Extensive development that is residential (including	change.(11.1), Habitat protection is essential, so			
								resorts), where the spacing allows ecological functions to	cooperation and education of land owners should be			
									high priority. (1.1.2), Need to control Phragmites			
								particularly in rural and agroforestry areas. E.g., residential	invasion at some known sites. (8.1.4)			
								buildings in agricultural areas, cottages, vacation homes				
							Habitat Shifting and	near water bodies, ecotourism lodges, fishing resorts,				
							Alteration / Low-Density	backcountry ski lodges. /				
							Housing Areas / Aquatic	, , , , , , , , , , , , , , , , , , , ,				
) Photuris bethaniensis	Bethany Beach firefly	Terrestrial Insect	Coleoptera		Beaches and Dunes	11.1.1.1.2.8.1.4	Plants					
	Doutinity Doutinitienty		ootooptoru					Extensive development that is residential (including	Habitat protection is essential, so cooperation and			
								resorts), where the spacing allows ecological functions to				
								resorts), where the spacing allows ecological functions to	(1.1.2) High elevation enories that may be succentible			
								continue to some extent. This type of development is seen	(1.1.2), right elevation species that may be susceptible			
								particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.1)			
								buildings in agricultural areas, cottages, vacation homes				
								near water bodies, ecotourism lodges, fishing resorts,				
								backcountry ski lodges. / Major changes in an ecosystem				
								resulting in changes to vegetation communities				
								distinguished from natural vegetation succession, which				
								may threaten open-country species (Threat 7.3.2). E.g.,				
								migration of deciduous trees towards the boreal forest,				
								rising sea levels, desertification, thawing permafrost (in				
							Low-Density Housing	tundra), coral bleaching. /				
							Areas / Changes in					
Manulea bicolor	Bicolored moth	Terrestrial Insect	Lepidoptera	III c	Boreal Forests	1.1.2, 11.1.1,	Vegetation Communities /					
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and			
								resorts), where the spacing allows ecological functions to				
								continue to some extent. This type of development is seen				
								particularly in rural and agroforestry areas. E.g., residential				
								buildings in agricultural areas, cottages, vacation homes				
								near water bodies, ecotourism lodges, fishing resorts,				
					Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. / /				
		Terrestrial Insect	Lepidoptera		Beaches and Dunes	1.1.2	Areas / /			1		

	A	В	С	D	E	F	G	Н	L	Р	Т
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
											Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Periodic fires or moving may be needed to
										continue to come official me type of actorophicitie coord	retard woody succession (7.3.2)
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
									Low-Density Housing	backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional	
									Areas / Vegetation	habitats. /	
43	Euphyes conspicua	Black dash	Terrestrial Insect	Lepidoptera	II	с	Non-tidal Wetlands	1.1.2, 7.3.2,	Succession /	Esternational and a state of the state of th	
										Extensive development that is residential (including resorts), where the spacing allows ecological functions to	Habitat protection is essential, so cooperation and education of land owners should be high priority.
										continue to some extent. This type of development is seen	(1.1.2), Periodic fires or moving may be needed to
										particularly in rural and agroforestry areas. E.g., residential	retard woody succession (7.3.2)
										buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Natural vegetation succession	
									Low-Density Housing	causing habitat loss for species of early successional	
44	Papaipema beeriana	Blazing star stem borer	Terrestrial Insect	Lepidoptera		а	Grasslands, Savannas	1.1.2, 7.3.2,	Areas / Vegetation Succession /	habitats. /	
					-			,,		Extensive development that is residential (including	Habitat protection is essential, so cooperation and
											education of land owners should be high priority.
										continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	(1.1.2)
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
45	Brachionycha borealis	Boreal Fan Moth	Terrestrial Insect	Lepidoptera	ш	c	Forests and Woodlands	1.1.2	Low-Density Housing Areas / /	backcountry ski lodges. / /	
										Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2), High density deer populations consume larval
										continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	hostplant (New Jersey tea) (8.2.2), Periodic fires or
										buildings in agricultural areas, cottages, vacation homes	selective logging may be needed to retard woody
										near water bodies, ecotourism lodges, fishing resorts,	succession (7.3.2)
										backcountry ski lodges. / e.g., increased grazing by white- tailed deer and snow geese. / Natural vegetation	
									Low-Density Housing	succession causing habitat loss for species of early	
							Forests and Woodlands, Shrublands, Glades and		Areas / Increased Grazing	successional habitats.	
46	Erastria coloraria	Broad-lined erastria	Terrestrial Insect	Lepidoptera	П	с	Barrens	1.1.2, 8.2.2, 7.3.2	by Vertebrates / Vegetation Succession		
										Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
l										buildings in agricultural areas, cottages, vacation homes	
									Low-Density Housing	near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	
47	Lycaena hyllus	Bronze copper	Terrestrial Insect	Lepidoptera	IV	с	Non-tidal Wetlands	1.1.2	Areas / /		
										Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2), High elevation species that may be susceptibl
										particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.1),
										buildings in agricultural areas, cottages, vacation homes	Complete removal of forest habitat for logging would
										near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem	render the habitat non-viable for this species. (5.3.1)
										resulting in changes to vegetation communities	
										distinguished from natural vegetation succession, which	
										may threaten open-country species (Threat 7.3.2). E.g.,	
										migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in	
										tundra), coral bleaching. / Cutting removing the majority	
									Low-Density Housing	of the forest cover. E.g., clear-cutting and related cuts (CT,	
									Areas / Changes in Vegetation Communities /	CRS, CPRS, CPHRS, CPPTM).	
l									Complete Removal of the		
48	Anaplectoides brunneomedia	Brown-lined dart moth	Terrestrial Insect	Lepidoptera	III	С	Forests and Woodlands	1.1.2, 11.1.1, 5.3.1	Forest Cover		

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is It protection is essential, so cooperation and tion of land owners should be high priority. , Periodic fires or moving may be needed to woody succession (7.3.2)	Working_Lands	Notes
It protection is essential, so cooperation and tion of land owners should be high priority. , Periodic fires or moving may be needed to woody succession (7.3.2)		
at protection is essential, so cooperation and tion of land owners should be high priority.		
It protection is essential, so cooperation and tion of land owners should be high priority. I, High density deer populations consume larval ant (New Jersey tea) (8.2.2), Periodic fires or two logging may be needed to retard woody ssion (7.3.2)	Timbered forested uplands	
at protection is essential, so cooperation and tion of land owners should be high priority.		
at protection is essential, so cooperation and tion of land owners should be high priority. I, High elevation species that may be susceptible ng temperatures from climate change. (11.1.1), lete removal of forest habitat for logging would r the habitat non-viable for this species. (5.3.1)		

	A	В	С	D	E	F	G	н	L	Р	Т
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
49	Pseudanophthalmus hortulanus	Burkes Garden cave beetle	Terrestrial Insect	Coleoptera	1	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
							Riparian and Floodplains,		Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Leucania calidior Amblyscirtes carolina	Cane wainscot	Terrestrial Insect	Lepidoptera		c	Non-tidal Wetlands	1.1.2	Areas / / Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Cicindela limbalis	Common Claybank Tiger Beetle	Terrestrial Insect				Forests and Woodlands		Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and T education of land owners should be high priority. (1.1.2)
	Pseudanophthalmus intersectus	Crossroads cave beetle	Terrestrial Insect	Coleoptera		c	Caves and Karst	1.1.2	Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
54	Pseudanophthalmus hirsutus	Cumberland Gap cave beetle	Terrestrial Insect	Coleoptera	1	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	
									Low-Density Housing Areas / Changes in	continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible to rising temperatures from climate change. (11.1.1)
1	Speranza ribearia	Currant Spanworm Moth	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands	1.1.2, 11.1.1,	Vegetation Communities		

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	Working_Lands	Notes
ential, so cooperation and		
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rs should be high priority.		
ential, so cooperation and		cane (Arundinaria) specialist
		cane (Arunumana) specialist
rs should be high priority.		
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becies that may be susceptible		
om climate change. (11.1.1)		

A	В	С	D	E	F	G	Н	L	P	Т	U	V
1 Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
										education of land owners should be high priority.		
									continue to some extent. This type of development is seen	(1.1.2), Complete removal of forest habitat for logging		
									particularly in rural and agroforestry areas. E.g., residentia	would render the habitat non-viable for this		
									buildings in agricultural areas, cottages, vacation homes	species.(5.3.1)		
									near water bodies, ecotourism lodges, fishing resorts,			
									backcountry ski lodges. / Cutting removing the majority of			
									the forest cover. E.g., clear-cutting and related cuts (CT,			
								Low-Density Housing	CRS, CPRS, CPHRS, CPPTM). /			
								Areas / Complete Removal				
56 Papaipema duplicata	Dark stoneroot borer moth	Terrestrial Insect	Lepidoptera	11	С	Forests and Woodlands	1.1.2, 5.3.1,	of the Forest Cover /				
									Natural vegetation succession causing habitat loss for	Need disturbance to keep fen habitat open (fire, woody		Hostplant is very rare in Virginia, so the sawfly'
									species of early successional habitats. / /	vegetation removal, etc.) (7.3.2)		fate is related to that of death camas.
57 Rhadinoceraea zigadenusae	Death-camas Sawfly	Terrestrial Insect	Ins-Hymenoptera	II	b	Glades and Barrens	7.3.2	Vegetation Succession / /				
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
									resorts), where the spacing allows ecological functions to			
									continue to some extent. This type of development is seen	(1.1.2)		
									particularly in rural and agroforestry areas. E.g., residentia			
									buildings in agricultural areas, cottages, vacation homes			
									near water bodies, ecotourism lodges, fishing resorts,			
								Low-Density Housing	backcountry ski lodges. / /			
58 Pseudanophthalmus deceptivus	Deceptive cave beetle	Terrestrial Insect	Coleoptera	I	с	Caves and Karst	1.1.2	Areas / /	, , , , , , , , , , , , , , , , , , , ,			
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
										education of land owners should be high priority.		
									continue to some extent. This type of development is seen	(1.1.2)		
									particularly in rural and agroforestry areas. E.g., residentia			
									buildings in agricultural areas, cottages, vacation homes			
									near water bodies, ecotourism lodges, fishing resorts,			
								Low-Density Housing	backcountry ski lodges. / /			
59 Pseudanophthalmus delicatus	Delicate cave beetle	Terrestrial Insect	Coleoptera	ш	c .	Caves and Karst	1.1.2	Areas / /	backcountry skilouges. 77			
	Delicate cave beette	Terrestriat insect	Coleoptera		C		1.1.2	Alcust /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
										education of land owners should be high priority.		
										(1.1.2), Complete removal of forest habitat for logging		
									continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residentia	would render the babitat non-viable for this		
										species.(5.3.1)		
										50000.(5.5.1)		
									near water bodies, ecotourism lodges, fishing resorts,			
									backcountry ski lodges. / Cutting removing the majority of			
									the forest cover. E.g., clear-cutting and related cuts (CT,			
								Low-Density Housing	CRS, CPRS, CPHRS, CPPTM). /			
								Areas / Complete Removal				
60 Speyeria diana	Diana fritillary	Terrestrial Insect	Lepidoptera	IV	С	Forests and Woodlands	1.1.2, 5.3.1,	of the Forest Cover /				
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
									resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
									continue to some extent. This type of development is seen	(1.1.2)		
									particularly in rural and agroforestry areas. E.g., residentia			
									buildings in agricultural areas, cottages, vacation homes			
									near water bodies, ecotourism lodges, fishing resorts,			
								Low-Density Housing	backcountry ski lodges. / /			
61 Acronicta dolli	Doll's dagger moth	Terrestrial Insect	Lepidoptera	Ш	с	Forests and Woodlands	1.1.2	Areas / /				
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
									resorts), where the spacing allows ecological functions to			
									continue to some extent. This type of development is seen	(1.1.2), High elevation species that may be susceptible		
									particularly in rural and agroforestry areas. E.g., residentia	to rising temperatures from climate change. (11.1.1)		
									buildings in agricultural areas, cottages, vacation homes			
									near water bodies, ecotourism lodges, fishing resorts,			
									backcountry ski lodges. / Major changes in an ecosystem			
									resulting in changes to vegetation communities			
									distinguished from natural vegetation succession, which			
									may threaten open-country species (Threat 7.3.2). E.g.,			
									migration of deciduous trees towards the boreal forest,			
									rising sea levels, desertification, thawing permafrost (in			
								Low-Density Housing	tundra), coral bleaching. /			
						Forests and Woodlands,		Areas / Changes in				
62 Graphiphora augur	Double Dart Moth	Terrestrial Insect	Lepidoptera	100	6	Non-tidal Wetlands	1.1.2, 11.1.1,	Vegetation Communities /				

	A	В		D	E	F	G	Н	L	Р	I
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
	Funda una da luca i	Dukasi shisaar	Townshiellesset				Non tidel Weblende		-	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in habitat composition or location /	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2), May be susceptible to rising sea levels from climate change. (11.1)
	Euphyes dukesi	Dukes' skipper	Terrestrial Insect	Lepidoptera		C	Non-tidal Wetlands	1.1.2, 11.1,	Alteration / Low-Density Housing Areas / Complete Removal of the Forest Cover /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Cutting removing the majority of the forest cover. E.g., clear-cutting and related cuts (CT, CRS, CPRS, CPHRS, CPPTM). /	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2), Complete removal of forest habitat fo would render the habitat non-viable for this species.(5.3.1)
64 6		Early hairstreak		Lepidoptera		C	Forests and woodtands	1.1.2, 5.3.1,	of the Porest Cover /	Extensive development that is residential (including	Habitat protection is essential, so cooperation
65 \$	Satyrium edwardsii	Edwards' hairstreak	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands, Glades and Barrens	1.1.2	Low-Density Housing Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	education of land owners should be high prio (1.1.2)
66 F	Pheosidea elegans	Elegant Prominent	Terrestrial Insect	Lepidoptera	111	С	Forests and Woodlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2)
67 0	Osmia felti	Felt's mason bee	Terrestrial Insect	Ins-Hymenoptera	IV	C	Forests and Woodlands, Glades and Barrens,	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2), Limit use of pesticides, especially neor near populations of all bees (9.3.3)
	Sphinx franckii	Franck's sphinx	Terrestrial Insect	Lepidoptera		c	Forests and Woodlands	1.1.2	Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2)
	<u>.</u>	Fringed loosestrife oil-							Low-Density Housing Areas / Herbicides and	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so cooperation education of land owners should be high prio (1.1.2), Limit use of pesticides, especially neor near populations of all bees (9.3.3)
	Macropis ciliata	collecting bee	Terrestrial Insect	Ins-Hymenoptera	IV	с	Glades and Barrens	1.1.2, 9.3.3,	Pesticides /		

Т	U	V
Actions	Working_Lands	Notes
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2), May be susceptible to rising sea levels resulting		
from climate change. (11.1)		
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2), Complete removal of forest habitat for logging		
would render the habitat non-viable for this species.(5.3.1)		
species.(3.3.1)		
Habitat protection is essential, so cooperation and	Timbered forested	
education of land owners should be high priority.	uplands	
(1.1.2)	uptantas	
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2)		
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2), Limit use of pesticides, especially neonicotinoids, near populations of all bees (9.3.3)		
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2)		
Habitat protection is essential, so cooperation and		
education of land owners should be high priority.		
(1.1.2), Limit use of pesticides, especially neonicotinoids,		
near populations of all bees (9.3.3)		

⊢	A	В	С	D	E	F	G	Н	L	Р	
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), Periodic fires or se
										particularly in rural and agroforestry areas. E.g., residential	needed to retard woody s
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Natural vegetation succession	
									Low-Density Housing	causing habitat loss for species of early successional	
							Forests and Woodlands,		Areas / Vegetation	habitats. /	
70	Callophrys irus	Frosted elfin	Terrestrial Insect	Lepidoptera	I	а	Glades and Barrens	1.1.2, 7.3.2,	Succession /		
										Extensive development that is residential (including	Habitat protection is esser
										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
									Low-Density Housing	backcountry ski lodges. / /	
71	Ellipsoptera lepida	Ghost tiger beetle	Terrestrial Insect	Coleoptera	Ш	с	Beaches and Dunes	1.1.2	Areas / /		
Ľ.										Extensive development that is residential (including	Habitat protection is esser
1										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
							Forests and Woodlands,		Low-Density Housing	near water bodies, ecotourism lodges, fishing resorts,	
70	Cumatanhara annravimaria	Giant Gray Moth	Terrestrial Insect	Lonidontoro			Non-tidal Wetlands	110	Areas / /	backcountry ski lodges. / /	
12	Cymatophora approximaria	Gidiit Gidy Motif	Terrestriat insect	Lepidoptera	III	С	Non-tiuat wettanus	1.1.2	Aleds / /	Free stars down by more weather the second start of the starting of	Uphitat protoction is assau
										Extensive development that is residential (including	Habitat protection is essen education of land owners
										resorts), where the spacing allows ecological functions to	
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
							Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. / /	
73	Anaea andria	Goated Leafwing	Terrestrial Insect	Lepidoptera	II	С	Glades and Barrens	1.1.2	Areas / /		
										Extensive development that is residential (including	Habitat protection is esser
1										resorts), where the spacing allows ecological functions to	education of land owners
										continue to some extent. This type of development is seen	(1.1.2), May be susceptible
1										particularly in rural and agroforestry areas. E.g., residential	from climate change. (11.1
1										buildings in agricultural areas, cottages, vacation homes	
1										near water bodies, ecotourism lodges, fishing resorts,	
1									Low-Density Housing	backcountry ski lodges. / Major changes in habitat	
1										composition or location /	
74	Drasteria graphica	Graphic moth	Terrestrial Insect	Lepidoptera	III	С	Beaches and Dunes	1.1.2, 11.1,	Alteration /		
1										Extensive development that is residential (including	Habitat protection is essen
1										resorts), where the spacing allows ecological functions to	education of land owners
1										continue to some extent. This type of development is seen	(1.1.2), High elevation spec
										particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from
1										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Major changes in an ecosystem	
1										resulting in changes to vegetation communities	
1										distinguished from natural vegetation succession, which	
L	1									may threaten open-country species (Threat 7.3.2). E.g.,	
1										migration of deciduous trees towards the boreal forest,	
										rising sea levels, desertification, thawing permafrost (in	
									Low-Density Housing	tundra), coral bleaching. /	
									Areas / Changes in		
7,	Arctia caia	Great Tiger Moth	Terrestrial Insect	Lenidoptoro		<u> </u>	Forests and Woodlands	1 1 2 11 1 1	Vegetation Communities /		
/5	Arctia caja	Great Tiger Moth	renestiatIIISect	Lepidoptera	111	С		1.1.2, 11.1.1,	vegetation Communities/		

Т	U	V
	Working_Lands	Notes
ential, so cooperation and rs should be high priority. selective logging may be r succession (7.3.2)	Timbered forested uplands	
ential, so cooperation and rs should be high priority.		
ential, so cooperation and		
rs should be high priority.		
ential, so cooperation and rs should be high priority.		
ential, so cooperation and rs should be high priority. ble to rising sea levels resulting 1.1)		
ential, so cooperation and rs should be high priority. becies that may be susceptible rom climate change. (11.1.1)		

A	В	С	D	E	F	G	Н	L	Р	Т
1 Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	t Habitats	Threat_Code	Threat_Description	Threat_Long Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	Actions Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible to rising temperatures from climate change. (11.1.1)
 76 Chlosyne harrisii 77 Catocala herodias gerhardi 	Harris's checkerspot Herodias or pine barrens underwing	Terrestrial Insect	Lepidoptera		с	Floodplains, Non-tidal Wetlands	1.1.2, 11.1.1,	Low-Density Housing Areas / Changes in Vegetation Communities / Low-Density Housing Areas / Suppression in the Fire Regime /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Intervention aimed at preventing and putting out forest fire (fire management). E.g., putting out forest fires, controlled burning, creating firebreaks and trenches, and other measures. /	
78 Callophrys hesseli	Hessel's hairstreak	Terrestrial Insect	Lepidoptera		C	Non-tidal Wetlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
79 Pseudanophthalmus hoffmani	Hoffman's cave beetle	Terrestrial Insect	Coleoptera		с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Habitat protection is essential, so cooperation and
80 Pseudanophthalmus holsingeri	Holsinger's cave beetle	Terrestrial Insect	Coleoptera	1	b	Caves and Karst	1.1.2	Low-Density Housing Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. // Extensive development that is residential (including	Habitat protection is essential, so cooperation and
81 Syngrapha alias	Hooked silver Y moth	Terrestrial Insect	Lepidoptera	Ш	С	Boreal Forests	1.1.2, 11.1.1,	Low-Density Housing Areas / Changes in Vegetation Communities /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible to rising temperatures from climate change. (11.1.1)

	Т	U	V
	Actions	Working_Lands	Notes
ng	Habitat protection is essential, so cooperation and	Grassland pastures	
ctions to	education of land owners should be high priority.	•	
t is seen	(1.1.2), High elevation species that may be susceptible		
esidential	to rising temperatures from climate change. (11.1.1)		
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homes			
orts,			
osystem			
, which			
. E.g.,			
orest,			
ost (in			
ng	Habitat protection is essential, so cooperation and		
ctions to	education of land owners should be high priority.		
t is seen	(1.1.2), Occurs in barren habitats that need periodic fire		
	(7.1.2)		
homes			
orts,			
reventing			
, putting			
eaks and			
n.d	Habitat protoction is assortial so cooperation and		Atlantia white coder crossalist
ng	Habitat protection is essential, so cooperation and		Atlantic white cedar specialist
ctions to	education of land owners should be high priority.		
it is seen	(1.1.2)		
esidential			
homes			
orts,			
ng	Habitat protection is essential, so cooperation and		
ctions to	education of land owners should be high priority.		
t is seen	(1.1.2)		
esidential			
homes			
orts,			
ng	Habitat protection is essential, so cooperation and		
ctions to	education of land owners should be high priority.		
it is seen	(1.1.2)		
esidential			
homes			
orts,			
ng	Habitat protection is essential, so cooperation and		
ctions to	education of land owners should be high priority.		
it is seen	(1.1.2), High elevation species that may be susceptible		
esidential	to rising temperatures from climate change. (11.1.1)		
homes			
orts,			
osystem			
, which			
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orest,			
ost (in			

A	В	С	D	E	F	G	Н	L	Р	Т
1 Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions Wo
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and
									resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2)
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
								Low-Density Housing	backcountry ski lodges. / /	
2 Copris howdeni	Howden's copris	Terrestrial Insect	Coleoptera	ш	с	Glades and Barrens	1.1.2	Areas / /		
									Extensive development that is residential (including	Commercial and residential developments in close
									resorts), where the spacing allows ecological functions to	
									continue to some extent. This type of development is seen	Habitat protection is essential, so cooperation and
									particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority. (1.1.2), Known only from a commercial cave; heavy
									buildings in agricultural areas, cottages, vacation homes	human visitation is a continuing threat to this species.
								Low-Density Housing	near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	(6.1.7)
33 Pseudanophthalmus hubbardi	Hubbard's cave beetle	Terrestrial Insect	Coleoptera		b	Caves and Karst	1.1.2, 6.1.7,	Areas / Caving /	DackCountry skilouges. 77	
			ooleopteru	•			1.1.2, 0.1.7,		Extensive development that is residential (including	Habitat protection is essential, so cooperation and
									resorts), where the spacing allows ecological functions to	education of land owners should be high priority.
									continue to some extent. This type of development is seen	
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
								Low-Density Housing	backcountry ski lodges. / /	
84 Pseudanophthalmus hubrichti	Hubricht's cave beetle	Terrestrial Insect	Coleoptera	I	С	Caves and Karst	1.1.2	Areas / /		
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and
									resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible
									continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	· · · · · · · · · · · · · · · · · · ·
									near water bodies, ecotourism lodges, fishing resorts,	
									backcountry ski lodges. / Major changes in an ecosystem	
									resulting in changes to vegetation communities	
									distinguished from natural vegetation succession, which	
									may threaten open-country species (Threat 7.3.2). E.g.,	
									migration of deciduous trees towards the boreal forest,	
									rising sea levels, desertification, thawing permafrost (in	
								Low-Density Housing	tundra), coral bleaching. /	
	Jefferson's short-nosed	TowestvielIncost	Magantara			Forests and Woodlands, Boreal Forests	1 1 0 11 1 1	Areas / Changes in		
85 Brachypanorpa jeffersoni	scorpionfly	Terrestrial Insect	Mecoptera	11	С	Boreat Forests	1.1.2, 11.1.1,	Vegetation Communities /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and
									resorts), where the spacing allows ecological functions to	
									continue to some extent. This type of development is seen	• • •
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
						Riparian and Floodplains,		Low-Density Housing	backcountry ski lodges. / /	
86 Satyrium kingi	King's hairstreak	Terrestrial Insect	Lepidoptera	111	С	Non-tidal Wetlands	1.1.2	Areas / /		
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and
									resorts), where the spacing allows ecological functions to	
									continue to some extent. This type of development is seen	
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	
						Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. / /	
37 Lithophane lemmeri	Lemmer's pinion moth	Terrestrial Insect	Lepidoptera	ш	с	Non-tidal Wetlands	1.1.2	Areas / /		
									Extensive development that is residential (including	Habitat protection is essential, so cooperation and Gra
									resorts), where the spacing allows ecological functions to	education of land owners should be high priority. pas
									continue to some extent. This type of development is seen	(1.1.2), Limit use of pesticides, especially neonicotinoids, shr
									particularly in rural and agroforestry areas. E.g., residential	near populations of all bees (9.3.3)
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
									backcountry ski lodges. / Includes the use of inputs for	
						Forests and Woodlands,		Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
Pombuo citainus	Lomon evelop humbled	Torroctvial	Ino I human	N7		Grasslands, Shrublands,	112022	Areas / Herbicides and	fungicides. /	
88 Bombus citrinus	Lemon cuckoo bumble b	ee Terrestriat insect	Ins-Hymenoptera	IV	d	Transportation Networks	1.1.2, 9.3.3,	Pesticides /		

Т	U	V
ns		Notes
at protection is essential, so cooperation and ation of land owners should be high priority.)	WUIKII <u>G</u> Lands	NULES
nercial and residential developments in close mity to a commerical cave are potential threats. at protection is essential, so cooperation and ation of land owners should be high priority. c), Known only from a commercial cave; heavy in visitation is a continuing threat to this species. c)		
at protection is essential, so cooperation and ation of land owners should be high priority.)		
at protection is essential, so cooperation and ation of land owners should be high priority. .), High elevation species that may be susceptible ing temperatures from climate change. (11.1.1)		
at protection is essential, so cooperation and ation of land owners should be high priority.		
at protection is essential, so cooperation and ation of land owners should be high priority. :)		
at protection is essential, so cooperation and ation of land owners should be high priority.), Limit use of pesticides, especially neonicotinoids, populations of all bees (9.3.3)	Grassland pastures, shrubland pastures	Nest parasite of other Bombus species, so fate related to its hosts

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1	A Scientific Name	B Common Nomo	C	D	E	F	G Habitats	H Throat Code	L Threat Description	P Threat Long	Actions
	Pseudanophthalmus cordicollis	Common_Name	Grouping Terrestrial Insect	Type Coleoptera	Tier	COR	Caves and Karst	Threat_Code	Threat_Description	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Metria amella	Live oak metria	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands, Beaches and Dunes	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
91	Polites mystic	Long dash	Terrestrial Insect	Lepidoptera		C	Grasslands, Riparian and Floodplains, Non-tidal Wetlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
						6	Caves and Karst		Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Pseudanophthalmus longiceps Pseudanophthalmus virginicus	Long-headed cave beetle	Terrestrial Insect	Coleoptera		C	Caves and Karst	1.1.2	Areas / / Low-Density Housing Areas / Oil and Gas Pipelines /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / infrastructure network for transporting oil and natural has products aboveground or underground, including seismic lines, but excluding extraction sites (Threat 3.1) /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2) A single cave endemic potentially threatened by a nearby gas pipeline.(4.2.2)
	Catocala marmorata	Marbled underwing	Terrestrial Insect	Lepidoptera	I	C	Forests and Woodlands	1.1.2, 5.3.1,	Low-Density Housing Areas / Complete Removal of the Forest Cover /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Cutting removing the majority of the forest cover. E.g., clear-cutting and related cuts (CT, CRS, CPRS, CPHRS, CPPTM). /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Complete removal of forest habitat for logging would render the habitat non-viable for this species.(5.3.1)
95	Hydraena maureenae	Maureen's shale stream beetle	Terrestrial Insect	Coleoptera		С	Riparian and Floodplains, Creeks and Rivers	7.3.3, 9.3.2,	Natural Erosion and Sedimentation / Soil Erosion, Sedimentation /	Removal, transport and deposition of sediments that is caused by natural erosional processes. To be distinguished from the transport of sediments that is associated with tides (Threat 4.3.1), or by drainage systems in agriculture (Threat 7.2.5) and forestry (Threat 7.2.6). / Erosion and sedimentation that are due to agricultural or silvicultural activities, regardless of the presence of local drainage systems (threat 7.2.4 and 7.2.5). /	Need to maintain good water quality of stream habitats (7.3.3), Follow BMPs to limit erosion and sedimentation (9.3.2)

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1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
96	Euchlaena milnei	Milne's euchlaena moth	Terrestrial Insect	Lepidoptera		C	Forests and Woodlands	1.1.2, 5.3.1,	Low-Density Housing Areas / Complete Removal of the Forest Cover /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Cutting removing the majority of the forest cover. E.g., clear-cutting and related cuts (CT, CRS, CPRS, CPHRS, CPPTM). /	Habitat protection is essen education of land owners (1.1.2), Complete removal would render the habitat species.(5.3.1)
	Neonympha mitchellii	Mitchell's satyr	Terrestrial Insect	Lepidoptera		a	Non-tidal Wetlands	1.1.2, 2, 7.3.2	Low-Density Housing Areas / Agriculture and Aquaculture / Vegetation Succession	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Threats from agricultural activities, such as the expansion and intensification of agriculture and livestock farming, including silviculture, mariculture, and aquaculture and related infrastructures. This includes the initial conversion of habitat (deforestation, filling/excavation, draining of wetlands, etc.) that is associated with cultivation or infrastructure development, as well as uses and practices (intensification of agricultural practices, use of machinery, etc.), but not the transport of the resources that are produced. / Natural vegetation succession causing habitat loss for species of early successional habitats.	Habitat protection is esser education of land owners (1.1.2), Avoid draining or o wetlands in livestock pastr invasion of sedge wetland
98	Danaus plexippus plexippus	Monarch butterfly	Terrestrial Insect	Lepidoptera	IV	а	Forests and Woodlands, Grasslands, Shrublands, Savannas, Glades and Barrens, Riparian and Floodplains, Shorelines, Beaches and Dunes, Transportation Networks	7.3.2, 8.3.1, 1.1.2	Vegetation Succession / Genetic Material from Agriculture / Low-Density Housing Areas	Natural vegetation succession causing habitat loss for species of early successional habitats. / e.g., pesticide- resistant cereals/forages, use of genetically modified insects for biocontrol. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. Extensive development that is residential (including resorts) where the spacing allows ecological functions to	Planting of milkweed (larv proposed as an important species (7.3.2), Genetically identified as a threat to m wintering grounds (Mexico habitat destruction (8.3.1) essential, so cooperation a should be high priority. (1 Habitat protection is essen education of land owners
99	Erynnis martialis	Mottled duskywing	Terrestrial Insect	Lepidoptera	1	С	Forests and Woodlands, Shrublands, Savannas, Glades and Barrens	1.1.2, 8.2.2, 7.3.2	Low-Density Housing Areas / Increased Grazing by Vertebrates / Vegetation Succession	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / e.g., increased grazing by white- tailed deer and snow geese. / Natural vegetation succession causing habitat loss for species of early successional habitats.	education of land owners (1.1.2), High density deer hostplant (New Jersey tea selective logging may be n succession (7.3.2)
100	Pseudanophthalmus limicola	Mud-dwelling cave beetle	Terrestrial Insect	Coleoptera	I	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Known cave sites are in clo highway and vulnerable to and development in the au essential, so cooperation a should be high priority. (1

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ential, so cooperation and s should be high priority. al of forest habitat for logging t non-viable for this	<u>c</u>	
ential, so cooperation and s should be high priority. r ditching of sedge-dominated stures (2), Need to retard woody ids (7.3.2)	Non-tidal wetland pastures	
rval hostplant) has been nt management action for this lly modified crops have been monarch populations. Also, the ico) are highly vulnerable to 1), Habitat protection is n and education of land owners (1.1.2)	Grassland pastures, shrubland pastures, savanna pastures	
ential, so cooperation and s should be high priority. r populations consume larval a) (8.2.2), Periodic fires or needed to retard woody	Timbered forested uplands	
close proximity to an interstate to increased population growth area. Habitat protection is and education of land owners (1.1.2)		

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1 S	cientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
										Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	Residential development in caves is a potential threat. essential, so cooperation a should be high priority. (1. commercial cave inhabited
101 F	seudanophthalmus pontis	Natural Bridge cave beetle	Terrestrial Insect	Coleoptera	11	с	Caves and Karst	1.1.2, 6.1.7,	Low-Density Housing Areas / Caving /	near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	continuing threat. (6.1.7)
101				on opportu						Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	Habitat protection is essen education of land owners s (1.1.2)
102 P	seudanophthalmus nelsoni	Nelson's cave beetle	Terrestrial Insect	Coleoptera	Ш	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	backcountry ski lodges. / /	
							Forests and Woodlands, Shrublands, Glades and		by Vertebrates / Vegetation	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / e.g., increased grazing by white-tailed deer and snow geese. / Natural vegetation succession causing habitat loss for species of early successional habitats.	Habitat protection is essen education of land owners s (1.1.2), High density deer p hostplant (New Jersey tea) selective logging may be ne succession (7.3.2)
103 A	podrepanulatrix liberaria	New Jersey tea inchworm	Terrestrial Insect	Lepidoptera		С	Barrens	1.1.2, 8.2.2, 7.3.2	Succession	Extensive development that is residential (including	Habitat protection is essen
104 F	seudanophthalmus egberti	New River Valley cave beetle	Terrestrial Insect	Coleoptera	11	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /		education of land owners s (1.1.2)
105 F	labroscelimorpha dorsalis dorsalis	Northeastern beach tiger beetle	Terrestrial Insect	Coleoptera	1	а	Beaches and Dunes	1.1.1, 1.1.2, 11.1	Dense Housing and Urban Areas / Low-Density Housing Areas / Habitat Shifting and Alteration	Medium- to high-density development for residential use and buildings for related services. Allows very little to no maintenance of ecological functions. E.g., urban areas, suburbs, villages, schools, libraries, seniors' housing, hospitals / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in habitat composition or location	Requires natural beaches, shoreline hardening, ripraj Habitat protection is essen education of land owners s (1.1.2), Susceptible to risin climate change. (11.1)
		Northern barrens tiger				-	Forests and Woodlands,		Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Using recreational motor vehicles. E.g., ATVs, motocross motorcycles, snowmobiles. /	Habitat protection is essen education of land owners s (1.1.2), ORV traffic within k and larvae (6.1.1)
<u>106</u> C	icindela patruela patruela	beetle	Terrestrial Insect	Coleoptera		C	Glades and Barrens	1.1.2, 6.1.1,	Areas / Motor Vehicles /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	Habitat protection is esser education of land owners : (1.1.2)
										near water bodies, ecotourism lodges, fishing resorts,	

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	Scientific_Name	Common_Name	Grouping Terrestrial Insect	Type Lepidoptera	Tier	COR	Habitats Forests and Woodlands, Glades and Barrens	Threat_Code	Threat_Description	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Actions Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
							Forests and Woodlands,		Low-Density Housing	receive, mere and options atome coordeneat another to	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Phyciodes cocyta	Northern Pearly Crescent	Terrestrial Insect	Lepidoptera	111	c	Glades and Barrens	1.1.2	Areas / / Low-Density Housing Areas / /	,, 1 0 0	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)
	Cicindela abdominalis		Terrestrial Insect	Coleoptera	1	b	Savannas, Glades and Barrens	7.1.2	Suppression in the Fire Regime / /	Intervention aimed at preventing and putting out forest fire (fire management). E.g., putting out forest fires, controlled burning, creating firebreaks and trenches, and other measures. / /	Requires open sandy habitats with periodic fire (7.1.2)
113	Euphyes pilatka	Palatka skipper	Terrestrial Insect	Lepidoptera		C	Tidal Creeks and Rivers, Large Tidal Rivers	1.1.2, 11.1,	Low-Density Housing Areas / Habitat Shifting ar Alteration /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in habitat d composition or location /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), May be susceptible to rising sea levels resulting from climate change. (11.1)
					1				Low-Density Housing Areas / Herbicides and		Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Limit use of pesticides, especially neonicotinoids, near populations of all bees (9.3.3)
	Macropis patellata Nomia maneei	Patellar oil-collecting bee	Terrestrial Insect	Ins-Hymenoptera	1	C	Grasslands	1.1.2, 9.3.3,	Pesticides / Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Limit use of pesticides, especially neonicotinoids, near populations of all bees (9.3.3)
114		r carty-banueu bee		ins-riyinenopield	1		Savannas	1.1.2, 3.3.3,	Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2) One of 2 known sites is a tourist cave, thus potentially impacted by human visitation. (6.1.7)
115	Pseudanophthalmus petrunkevitch	i Petrunkevitch's cave beetle	Terrestrial Insect	Coleoptera	11	с	Caves and Karst	1.1.2, 6.1.7,	Areas / Caving /		

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bitats with periodic fire (7.1.2)	Timbered forested	
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ites is a tourist cave, thus		
human visitation. (6.1.7)		

1 Scientific Name	В	C	D	E	F G	Н		Р		U	V
	Common_Name	Grouping	Туре	Tier CO	R Habitats	Threat_Code	Threat_Description		Actions	U _	Notes
									Habitat protection is essential, so cooperation and	Timbered forested	
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	uplands	
								continue to some extent. This type of development is seen	(1.1.2), Occurs in barren habitats that need periodic fire		
								particularly in rural and agroforestry areas. E.g., residential	(7.1.2)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Intervention aimed at preventing			
								and putting out forest fire (fire management). E.g., putting			
								out forest fires, controlled burning, creating firebreaks and			
							Low-Density Housing	trenches, and other measures. /			
					Forests and Woodlands,		Areas / Suppression in the				
	.										
Zale lunifera	Pine barrens zale moth	Terrestrial Insect	Lepidoptera	III c	Glades and Barrens	1.1.2, 7.1.2,	Fire Regime /				
									Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
								continue to some extent. This type of development is seen	(1.1.2), May be susceptible to rising sea levels resulting		
								particularly in rural and agroforestry areas. E.g., residential	from climate change. (11.1)		
								buildings in agricultural areas, cottages, vacation homes			
								near water bodies, ecotourism lodges, fishing resorts,			
1							Low-Density Housing	backcountry ski lodges. / Major changes in habitat			
							Areas / Habitat Shifting and	composition or location /			
7 Derrima stellata	Pink star moth	Terrestrial Insect	Lepidoptera	ll c	Beaches and Dunes	1.1.2, 11.1,	Alteration /				
			Lepidopiela			···~, ·1·1,		Extensive development that is residential (including	Habitat protection is assontial to connection and		
									Habitat protection is essential, so cooperation and		
								resorts), where the spacing allows ecological functions to			
									(1.1.2), High elevation species that may be susceptible		
								particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.1)		
								buildings in agricultural areas, cottages, vacation homes			
1								near water bodies, ecotourism lodges, fishing resorts,			
								backcountry ski lodges. / Major changes in an ecosystem			
1								resulting in changes to vegetation communities			
1								distinguished from natural vegetation succession, which			
								may threaten open-country species (Threat 7.3.2). E.g.,			
								migration of deciduous trees towards the boreal forest,			
								rising sea levels, desertification, thawing permafrost (in			
					Forests and Woodlands,		Low-Density Housing	tundra), coral bleaching. /			
					Grasslands, Shrublands,		Areas / Changes in				
18 Colias interior	Dials a data da subabum	Terrestrial Insect	Lepidoptera	III c	Glades and Barrens	1.1.2, 11.1.1,	Vegetation Communities /				
	PINK-edged SUIDDUIT		Lopidoptord		otadoo ana barrono	,,	rogotation oonintantioo7		Helitat contention is consulted on consulting and		
	Pink-edged sulphur							Extensive development that is residential (including			
	Pink-eaged sulphur								Habitat protection is essential, so cooperation and		
	Pink-eagea sulphur							resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
	Pink-eagea sulphur								education of land owners should be high priority.		
	Pink-eagea sulphur							resorts), where the spacing allows ecological functions to	education of land owners should be high priority.		
	Pink-eagea sulphur							resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority.		
	Pink-eagea sulphur							resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	education of land owners should be high priority.		
	Pink-eagea sulphur							resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	education of land owners should be high priority.		
							Low-Density Housing	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	education of land owners should be high priority.		
	Plain schizura	Terrestrial Insect	Lepidoptera	III c	Shrublands, Savannas	1.1.2	Low-Density Housing Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	education of land owners should be high priority.		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	education of land owners should be high priority.		
			Lepidoptera	III c	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. // Extensive development that is residential (including resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.		
			Lepidoptera	III c	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. // Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter		
			Lepidoptera	III c	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	, ,	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. // Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
			Lepidoptera	III C	Shrublands, Savannas	1.1.2	Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
			Lepidoptera	III C		1.1.2	Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect		III c	Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
9 Coelodasys apicalis			Lepidoptera	III C		1.1.2	Areas / /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater		
19 Coelodasys apicalis 20 Problema bulenta	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. /	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.		
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.	Timbered forested	
9 Coelodasys apicalis	Plain schizura	Terrestrial Insect			Large Tidal Rivers, Tidal		Areas / / Low-Density Housing Areas / Vegetation	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. / Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential	education of land owners should be high priority. (1.1.2) Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Rising sea levels due to climate change may alter salinity and thus vegetation composition of freshwater tidal marshes (7.3.2) Habitat protection is essential, so cooperation and education of land owners should be high priority.	Timbered forested	

A	В	С	D	E	F	G	н	L	Р	T
1 Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions Workin
122 Amblyscirtes reversa	Reversed roadside-skipper	Terrestrial Insect	Lepidoptera	111	С	Non-tidal Wetlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	
								Low-Density Housing Areas / Soil Erosion,	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Erosion and sedimentation that are due to agricultural or silvicultural activities, regardless of the presence of local drainage systems (threat 7.2.4 and 7.2.5). /	(9.3.2)
123 Cicindela ancocisconensis	Riverbank tiger beetle	Terrestrial Insect	Coleoptera	Ш	С	Riparian and Floodplains	1.1.2, 9.3.2,	Sedimentation /		
124 Loscopia roblei	Roble's cane borer	Terrestrial Insect	Lepidoptera	11	с	Non-tidal Wetlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	
125 Pseudanophthalmus rotundatus	Rotund cave beetle	Terrestrial Insect	Coleoptera	11	b	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	
					~	Forests and Woodlands,		Low-Density Housing Areas / Herbicides and	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. / Diseases caused by various taxa of pathogenic micro-organisms living within hosts.	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Limit use of pesticides, especially neonicotinoids, near populations of all bees (9.3.3)Grassl pastur shrubl
126 Bombus affinis 127 Pseudanophthalmus sanctipauli	Rusty-patched bumble bee	Terrestrial Insect	Ins-Hymenoptera Coleoptera	1	с	Grasslands, Shrublands	1.1.2, 9.3.3, 8.4	Pesticides / Pathogens Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	

Т	U	V
	Working_Lands	Notes
ential, so cooperation and rs should be high priority.		cane (Arundinaria) specialist
ential, so cooperation and 's should be high priority. imit erosion and sedimentation		
ential, so cooperation and		
ential, so cooperation and s should be high priority.		
ential, so cooperation and s should be high priority. icides, especially neonicotinoids, ees (9.3.3)	Grassland pastures, shrubland pastures	Rangewide decline may be due to a pathogen
ential, so cooperation and rs should be high priority.		

А	В	C	D	E	F G	Н	L	Р	Т	U	V
Scientific_Name	Common_Name	Grouping	Туре	Tier (COR Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes
Scientific_Name	Salt-and-pepper Looper				Forests and Woodlands,		Low-Density Housing Areas / Changes in	Threat_Long Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible	Working_Lands	Notes
8 Syngrapha rectangula	Moth	Terrestrial Insect	Lepidoptera	III c	Boreal Forests	1.1.2, 11.1.1,	Vegetation Communities /				
							Low-Density Housing Areas / Herbicides and	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especially neonicotinoids,		
9 Hylaeus saniculae	Sanicle yellow-faced bee	Terrestrial Insect	Ins-Hymenoptera	IV c	n/a	1.1.2, 9.3.3,	Pesticides /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and		
30 Sphaeroderus schaumi	Schaum's ground beetle	Terrestrial Insect	Coleoptera	III c	: Forests and Woodlands	1.1.2, 5.3.1,	Low-Density Housing Areas / Complete Removal of the Forest Cover /	resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Cutting removing the majority of the forest cover. E.g., clear-cutting and related cuts (CT, CRS, CPRS, CPHRS, CPPTM). /	(1.1.2)Maintain forest cover; avoid clearcutting (5.3.1)		
	Seaside Goldenrod Stem						Low-Density Housing Areas / Changes in	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	(1.1.2), May be susceptible to rising sea levels resulting		
31 Papaipema duovata	Borer	Terrestrial Insect	Lepidoptera	III c	Beaches and Dunes	1.1.2, 11.1.1,	Vegetation Communities /				
32 Pseudanophthalmus sericus	Silken cave beetle	Terrestrial Insect	Coleoptera	I t) Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	(1.1.2)		

A A	B	C	D	E	F	G	H Thurs at Oards		P	
Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
									Extensive development that is residential (including	Habitat protection is essential, so cooperation
									resorts), where the spacing allows ecological functions to	education of land owners should be high prior
									continue to some extent. This type of development is seen	(1.1.2), High elevation species that may be sus
									particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (1
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
									backcountry ski lodges. / Major changes in an ecosystem	
									resulting in changes to vegetation communities	
									distinguished from natural vegetation succession, which	
									may threaten open-country species (Threat 7.3.2). E.g.,	
									migration of deciduous trees towards the boreal forest,	
									rising sea levels, desertification, thawing permafrost (in	
								Low-Density Housing	tundra), coral bleaching. /	
						Riparian and Floodplains,		Areas / Changes in		
3 Boloria selene	Silver-bordered fritillary	Terrestrial Insect	Lepidoptera	Ш	с	Non-tidal Wetlands	1.1.2, 11.1.1,	Vegetation Communities /		
									Extensive development that is residential (including	Habitat protection is essential, so cooperation
									resorts), where the spacing allows ecological functions to	education of land owners should be high priori
									continue to some extent. This type of development is seen	(1.1.2)
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
Pseudanophthalmus potomaca	South branch valley cave							Low-Density Housing	backcountry ski lodges. / /	
4 potomaca	beetle	Terrestrial Insect	Coleoptera	1	с	Caves and Karst	1.1.2	Areas / /		
									Extensive development that is residential (including	Protect coastal bottomland hardwood forests
									resorts), where the spacing allows ecological functions to	development. (1.1.2)
									continue to some extent. This type of development is seen	
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
						Forests and Woodlands,		Low-Density Housing	backcountry ski lodges. / /	
5 Basilia boardmani	Southeastern myotis bat fly	Terrestrial Insect	Diptera	ш	с	Non-tidal Wetlands	1.1.2	Areas / /		
					-				Extensive development that is residential (including	Habitat protection is essential, so cooperation
									resorts), where the spacing allows ecological functions to	education of land owners should be high prior
									continue to some extent. This type of development is seen	(1.1.2), Limit use of pesticides, especially neon
									particularly in rural and agroforestry areas. E.g., residential	
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
									backcountry ski lodges. / Includes the use of inputs for	
						Forests and Woodlands,		Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,	
						Shrublands, Savannas,		Areas / Herbicides and		
6 Bombus fraternus	Southern plains bumble bee	Terrestrial Insect	Ins-Hymenoptera		2	Urban Lands	1.1.2, 9.3.3,	Pesticides /	fungicides. /	
	Southern plains builble bee	Terrestriat insect	піз-пупіепоріега	11	а	Of Dall Latius	1.1.2, 9.3.3,	Festicides/	Extensive development that is residential (including	Habitat protection is accontial, so cooperation
									Extensive development that is residential (including resorts), where the spacing allows ecological functions to	Habitat protection is essential, so cooperation
										(1.1.2), High elevation species that may be susc
									continue to some extent. This type of development is seen	In the second second second because the second s
									particularly in rural and agroforestry areas. E.g., residential	to hang temperatures non-tennate change. (1
									buildings in agricultural areas, cottages, vacation homes	
									near water bodies, ecotourism lodges, fishing resorts,	
									backcountry ski lodges. / Major changes in an ecosystem	
									resulting in changes to vegetation communities	
									distinguished from natural vegetation succession, which	
									may threaten open-country species (Threat 7.3.2). E.g.,	
									migration of deciduous trees towards the boreal forest,	
									rising sea levels, desertification, thawing permafrost (in	
1								Low-Density Housing	tundra), coral bleaching. /	
						Forests and Woodlands,		Areas / Changes in		
7 Rheumaptera hastata	Spear-marked black moth	Terrestrial Insect	Lepidoptera	IV	с	Boreal Forests	1.1.2, 11.1.1,	Vegetation Communities /		
									Extensive development that is residential (including	Habitat protection is essential, so cooperation
									resorts), where the spacing allows ecological functions to	education of land owners should be high prior
					1				continue to some extent. This type of development is seen	(1.1.2)
									particularly in rural and agroforestry areas. E.g., residential	
									particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes	
								Low-Density Housing	particularly in rural and agroforestry areas. E.g., residential	

Т	U	V
s protection is essential, so cooperation and ion of land owners should be high priority. High elevation species that may be susceptible g temperatures from climate change. (11.1.1)	Working_Lands Grassland pastures	Notes
protection is essential, so cooperation and ion of land owners should be high priority.		
coastal bottomland hardwood forests from oment. (1.1.2)		Bat ectoparasite. Fate related to bat population.
protection is essential, so cooperation and ion of land owners should be high priority. Limit use of pesticides, especially neonicotinoids, opulations of all bees (9.3.3)	Grassland pastures, shrubland pastures	
protection is essential, so cooperation and ion of land owners should be high priority. High elevation species that may be susceptible g temperatures from climate change. (11.1.1)		
protection is essential, so cooperation and ion of land owners should be high priority.		

	A	В	C	D	E	F	G	Н	L	Р	
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
139	Pseudanophthalmus quadratus	Straley's cave beetle	Terrestrial Insect	Coleoptera	11	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Habitat protection is esser education of land owners : (1.1.2)
140	Callosamia securifera	Sweetbay Silkmoth	Terrestrial Insect	Lepidoptera	IV	с	Forests and Woodlands, Riparian and Floodplains, Non-tidal Wetlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Habitat protection is essen education of land owners s (1.1.2)
141	Dargida rubripennis	The pink streak	Terrestrial Insect	Lepidoptera	IV	с	Grasslands, Shrublands, Savannas	1.1.2, 7.3.2,	Low-Density Housing Areas / Vegetation Succession /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Natural vegetation succession causing habitat loss for species of early successional habitats. /	Habitat protection is essen education of land owners s (1.1.2), Periodic fires or mo retard woody succession (7
142	Hadena ectypa	The starry campion moth	Terrestrial Insect	Lepidoptera	111	C	Forests and Woodlands	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	Habitat protection is esser education of land owners (1.1.2)
						-			Low-Density Housing	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Residential development i caves is a potential threat. essential, so cooperation a should be high priority. (1 tourist cave, thus potentia visitation.(6.1.7)
143	Pseudanophthalmus parvicollis	Thin-neck cave beetle	Terrestrial Insect	Coleoptera	1	b	Caves and Karst	1.1.2, 6.1.7,	Areas / Caving /		
	Pseudanophthalmus thomasi	Thomas' cave beetle	Terrestrial Insect	Coleoptera	1	с	Caves and Karst	1.1.2	Low-Density Housing Areas / /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / /	Commercial and residentia proximity to the known ca threats.Habitat protection and education of land owr
										Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts,	Habitat protection is esser education of land owners (1.1.2)
		Triangle-barred woodgrain							Low-Density Housing	backcountry ski lodges. / /	

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	Working_Lands	Notes
ential, so cooperation and rs should be high priority.		
ential, so cooperation and rs should be high priority.		
ential, so cooperation and rs should be high priority. moving may be needed to n (7.3.2)		
ential, so cooperation and rs should be high priority.		
t in close proximity to inhabited at. Habitat protection is n and education of land owners (1.1.2), One of 2 known sites is a tially impacted by human		
tial developments in close cave system are potential on is essential, so cooperation wners should be high priority.		
ential, so cooperation and rs should be high priority.		

1						-		Н			
	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions
										Extensive development that is residential (including	Habitat protection is essential, so cooperation an
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority.
										continue to some extent. This type of development is seen	(1.1.2), Avoid draining or ditching of sedge-domin
										particularly in rural and agroforestry areas. E.g., residential	wetlands in livestock pastures (2.)
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Threats from agricultural	
										activities, such as the expansion and intensification of	
										agriculture and livestock farming, including silviculture,	
										mariculture, and aquaculture and related infrastructures.	
										This includes the initial conversion of habitat	
										(deforestation, filling/excavation, draining of wetlands,	
										etc.) that is associated with cultivation or infrastructure	
										development, as well as uses and practices	
										(intensification of agricultural practices, use of machinery,	
										etc.), but not the transport of the resources that are	
									Low-Density Housing	produced, crop irrigation, of the resources that are	
										produced. /	
1/6	Euphyes bimacula	Two-spotted skipper	Terrestrial Insect	Lepidoptera	111	с	Non-tidal Wetlands	1.1.2, 2,	Areas / Agriculture and Aquaculture /		
140		тио-эрошей экірреі	1011030101113001	Lehinohieig		U I		1.1.2, 2,	Aquacullule/	Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority.
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
									Low-Density Housing	backcountry ski lodges. / /	
147	Pseudanophthalmus vicarius	Vicariant cave beetle	Terrestrial Insect	Coleoptera	П	с	Caves and Karst	1.1.2	Areas / /		
	•									Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority.
										continue to some extent. This type of development is seen	(1.1.2), High elevation species that may be suscept
										particularly in rural and agroforestry areas. E.g., residential	to rising temperatures from climate change. (11.1.
										buildings in agricultural areas, cottages, vacation homes	
										near water bodies, ecotourism lodges, fishing resorts,	
										backcountry ski lodges. / Major changes in an ecosystem	
										resulting in changes to vegetation communities	
										distinguished from natural vegetation succession, which	
										may threaten open-country species (Threat 7.3.2). E.g.,	
										migration of deciduous trees towards the boreal forest,	
										rising sea levels, desertification, thawing permafrost (in	
									Low-Density Housing	tundra), coral bleaching. /	
									Areas / Changes in		
148	Ctenucha virginica	Virginia Ctenucha moth	Terrestrial Insect	Lepidoptera	III	С	Grasslands, Shrublands	1.1.2, 11.1.1,	Vegetation Communities /	Estamples development of the state of the state	Helphan and the former state
										Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority. (1.1.2), Control garlic mustard (toxic to larvae) in a
										continue to some extent. This type of development is seen	1 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
									Low Donsity Housing	near water bodies, ecotourism lodges, fishing resorts,	
140	Pieris virginiensis	West Virginia white	Terrestrial Insect	Lenidontera	IV	с	Forests and Woodlands	1.1.2, 11.1.4,	Low-Density Housing Areas / /	backcountry ski lodges. / /	
149		West Virginia white	Terrestrial Insect	Lepidoptera	IV	L	i orests and Woouldinds	1.1.2, 11.1.4,		Intervention aimed at preventing and putting out forest fire	Requires onen sandy habitats with periodic fire /7
										(fire management). E.g., putting out forest fires, controlled	requires open sandy habitats with periodic file (7.
									Suppression in the Fire	burning, creating firebreaks and trenches, and other	
150	Ellipsoptera gratiosa	Whitish tiger beetle	Terrestrial Insect	Coleoptera		b	Glades and Barrens	7.1.2	Regime / /	measures. / /	
. 50				colooptora	•	2			поршо / /	Extensive development that is residential (including	Habitat protection is essential, so cooperation and
										resorts), where the spacing allows ecological functions to	education of land owners should be high priority.
										continue to some extent. This type of development is seen	(1.1.2)
										particularly in rural and agroforestry areas. E.g., residential	
										buildings in agricultural areas, cottages, vacation homes	
					1	1					
										near water bodies, ecotourism lodges, fishing resorts	
							Riparian and Floodplains,		Low-Density Housing	near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. //	

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ncluding al functions to ppment is seen E.g., residential cation homes ng resorts, cultural ification of silviculture, ifrastructures. it f wetlands, frastructure s e of machinery, that are that are	Actions Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Avoid draining or ditching of sedge-dominated wetlands in livestock pastures (2.)	Working_Lands	Notes
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		
ncluding al functions to opment is seen E.g., residential cation homes ng resorts, an ecosystem ities ession, which 7.3.2). E.g., oreal forest, ermafrost (in	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), High elevation species that may be susceptible to rising temperatures from climate change. (11.1.1)	Grassland pastures, Shrubland pastures	
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2), Control garlic mustard (toxic to larvae) in areas where this species occurs (11.1.4)	Timbered forested uplands	
g out forest fire ires, controlled ind other	Requires open sandy habitats with periodic fire (7.1.2)		
ncluding al functions to opment is seen E.g., residential cation homes ng resorts,	Habitat protection is essential, so cooperation and education of land owners should be high priority. (1.1.2)		

A	В	С	D	E F	G	н	L	Р	т	U V
1 Scientific_Name	Common_Name	Grouping	Туре	Tier CO	R Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands Notes
								Extensive development that is residential (including		Grassland
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	pastures,
									(1.1.2), Limit use of pesticides, especially neonicotinoids,	shrubland pastures
								particularly in rural and agroforestry areas. E.g., residentia	l near populations of all bees (9.3.3)	
								buildings in agricultural areas, cottages, vacation homes		
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Includes the use of inputs for		
					Forests and Woodlands,		Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,		
					Grasslands, Urban Lands,		Areas / Herbicides and	fungicides. /		
152 Bombus fervidus	Yellow bumble bee	Terrestrial Insect	Ins-Hymenoptera	IV a	Croplands, Orchards	1.1.2, 9.3.3,	Pesticides /			
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	
								continue to some extent. This type of development is seen	(1.1.2), Complete removal of forest habitat for logging	
								particularly in rural and agroforestry areas. E.g., residentia	l would render the habitat non-viable for this	
								buildings in agricultural areas, cottages, vacation homes	species.(5.3.1)	
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Cutting removing the majority o		
								the forest cover. E.g., clear-cutting and related cuts (CT,		
							Low-Density Housing	CRS, CPRS, CPHRS, CPPTM). /		
							Areas / Complete Remova			
153 Papaipema astuta	Yellow stoneroot borer moth	Terrestrial Insect	Lepidoptera	ll c	Forests and Woodlands	1.1.2, 5.3.1,	of the Forest Cover /			
						,,		Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
								resorts), where the spacing allows ecological functions to		
								continue to some extent. This type of development is seen	(1.1.2), Limit use of pesticides, especially neonicotinoids,	
								narticularly in rural and agroforestry areas. E.g. residentia	$_{\rm l}$ near populations of all bees (9.3.3) May be susceptible	
								buildings in agricultural areas, cottages, vacation homes	to rising temperatures from climate change. (11.3.3)	
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Includes the use of inputs for		
								controlling crop pests. E.g., herbicides, insecticides,		
								fungicides. / e.g., altered sex-ratio in species relying upor		
								a temperature dependent sex determination, reduction of		
							Low Density Housing	dissolved oxygen that is available to fish species, earlier		
							Low-Density Housing	ice-free dates, thawing of permafrost affecting bird		
							Areas / Herbicides and	breeding sites.		
154 Dombus terrisols	Vallau, bandad humbla baa	Torrectric! Incost	Ing Livegenenters		Forests and Woodlands,	1 1 0 0 0 0 11 0 0	Pesticides / Gradual			
154 Bombus terricola	Yellow-banded bumble bee	Terrestriat insect	Ins-Hymenoptera	ll a	Shrublands	1.1.2, 9.3.3, 11.3.3	Temperature Change	Esternation describer on the state of in marine state (in stations)	Unpitat protoction is accontial so comparation and	
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
								resorts), where the spacing allows ecological functions to	(1.1.2), Occurs in barren habitats that need periodic fire	
								particularly in rural and agroforestry areas. E.g., residentia	((7.1.2)	
								buildings in agricultural areas, cottages, vacation homes		
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Intervention aimed at preventin	۶ ۲	
								and putting out forest fire (fire management). E.g., putting		
								out forest fires, controlled burning, creating firebreaks and		
							Low-Density Housing	trenches, and other measures. /		
	Yellow-edged pygarctia						Areas / Suppression in the			
155 Pygarctia abdominalis	moth	Terrestrial Insect	Lepidoptera	ll c	Glades and Barrens	1.1.2, 7.1.2,	Fire Regime /			
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
								resorts), where the spacing allows ecological functions to		
									(1.1.2), Limit use of pesticides, especially neonicotinoids,	
								particularly in rural and agroforestry areas. E.g., residentia	l near populations of all bees (9.3.3)	
								buildings in agricultural areas, cottages, vacation homes		
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Includes the use of inputs for		
							Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,		
							Areas / Herbicides and	fungicides. /		
156 Andrena chromotricha		Terrestrial Insect	Ins-Hymenoptera	IV c	Grasslands, Shrublands	1.1.2, 9.3.3,	Pesticides /			
								Extensive development that is residential (including	Habitat protection is essential, so cooperation and	
								resorts), where the spacing allows ecological functions to	education of land owners should be high priority.	
								continue to some extent. This type of development is seen	(1.1.2), Limit use of pesticides, especially neonicotinoids,	
								particularly in rural and agroforestry areas. E.g., residentia	l near populations of all bees (9.3.3)	
								buildings in agricultural areas, cottages, vacation homes		
								near water bodies, ecotourism lodges, fishing resorts,		
								backcountry ski lodges. / Includes the use of inputs for		
							Low-Density Housing	controlling crop pests. E.g., herbicides, insecticides,		
							Areas / Herbicides and	fungicides. /		
157 Anthonhora ursing		Terrestrial Incost	Ins-Hymonoptoro	N/ C	n/a	112022		таныснась. <i>г</i>		
157 Anthophora ursina		Terrestrial Insect	Ins-Hymenoptera	IV c	n/a	1.1.2, 9.3.3,	Pesticides /			

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1			Ţ		_		Habitats	Threat_Code	L Threat_Description	Threat_Long	Actions
	Anthophorula michneri		Terrestrial Insect			c	n/a	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especia
									Low-Density Housing Areas / Herbicides and	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especia near populations of all bees (9.3.3)
	Dianthidium simile					c	Shrublands	1.1.2, 9.3.3,	Pesticides / Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especia near populations of all bees (9.3.3)
	Lasioglossum raleighense					C	Savannas	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especia near populations of all bees (9.3.3)
<u>16</u> 2	2 Megachile rubi		Terrestrial Insect	Ins-Hymenoptera	11	c	Savannas	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especia
	B Melitta eickworti		Terrestrial Insect		IV	C	Forests and Woodlands		Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Habitat protection is essential, so coop education of land owners should be hi (1.1.2), Limit use of pesticides, especia near populations of all bees (9.3.3)

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T	U Working Landa	V
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids, ions of all bees (9.3.3)	Working_Lands	Notes
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids,		
ions of all bees (9.3.3)		
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids, ions of all bees (9.3.3)		Nest parasite of Colletes bees, so fate related to its hosts
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids, ions of all bees (9.3.3)		
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids, ions of all bees (9.3.3)		
ection is essential, so cooperation and land owners should be high priority. use of pesticides, especially neonicotinoids, ions of all bees (9.3.3)		

А	В	С	D	E	F	G	Н	L	Р	Т	U	V	
1 Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes	
164 Osmia chałybea		Terrestrial Insect	Ins-Hymenoptera	IV		Grasslands, Savannas, Transportation Networks, Croplands	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residentia buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especially neonicotinoids,			
165 Pseudopanurgus virginicus		Terrestrial Insect	Ins-Hymenoptera				1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residentia buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especially neonicotinoids,			
166 Trachusa dorsalis		Terrestrial Insect	Ins-Hymenoptera	11		Forests and Woodlands, Glades and Barrens	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residentia buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especially neonicotinoids,			
167 Xylocopa micans		Terrestrial Insect	Ins-Hymenoptera	IV		Forests and Woodlands, Shrublands	1.1.2, 9.3.3,	Low-Density Housing Areas / Herbicides and Pesticides /	Extensive development that is residential (including resorts), where the spacing allows ecological functions to continue to some extent. This type of development is seen particularly in rural and agroforestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near water bodies, ecotourism lodges, fishing resorts, backcountry ski lodges. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	(1.1.2), Limit use of pesticides, especially neonicotinoids,	Shrubland pasture	S	