



**United States
Fish & Wildlife Service**

Savannah Coastal National Wildlife Refuges
1000 Business Center Drive, Suite 10
Savannah, GA 31405
November 1, 2001

Jaret C. Daniels, PhD.
Butterfly Kingdom
430 William Hilton Parkway
Pineland Station, Suite 511
Hilton Head Island, SC. 29926

Dear Jaret:

I would like to thank you so much for volunteering for surveying the butterflies on Pinckney NWR. Your expertise was invaluable for this inventory. It will help considerably in writing the initial management plan for the fields and mowing and management strategy. We will incorporate this information with that of other surveys to devise a plan to benefit multiple species of wildlife on Pinckney. I talked to Donny Browning, Project Leader for Savannah Coastal Refuges about my interests and he was very supportive. He even mentioned an interpreted butterfly trail in the future.

I have enclosed copies of **Drafts** of the survey data, a species list with host plants, and a survey form to use when and if we get in a survey in November. I should have done the survey form before we started, it would have made logging the information much easier - oh well. Thumbing through the book was a pain (although a learning exercise) so I built the species list to look at seasonal variations (realizing that this is a very limited amount of data). Now, if I want to look for a specific species I have a reference for the plants or habitats I should look at.

Some of the counts were easy to tie to a field or area, ie. 3 Admirals in three different locales. Some of the others I took the liberty of distributing to the locales percentage wise based on what I remember seeing in the different places and what distribution I observed while on the refuge. Not very scientific but fairly close I think. If you see anything glaring please let me know.

Anyway wanted to say thanks and have your comments. Please share this letter with your supervisor to let him know how appreciative we are of your Partnering with the US Fish & Wildlife Service.

Sincerely,



Allan Flock
Deputy Project Leader

cc: Donny Browning, Project Leader
Harvey Hill, Refuge Manager

Butterfly Survey Species List - Pinckney Island - 2001

Common Name	Genus species	Host Plants	Season of Use Based on Surveys
American Lady	<i>Vanessa virginiensis</i>	composites	May
Buckeye	<i>Junonia coenia</i>	Verbenacea family	May - October
Carolina Satyr	<i>Hermeuptychia sosybius</i>	grasses, Poaceae family	May - September
Cloudless Sulphur	<i>Phoebus sennae</i>	partridge pea, senna, legumes	August - October
Common Checkered Skipper	<i>Pyrgus communis</i>	mallows	May
Eastern Tiger Swallowtail	<i>Pterourus glaucus</i>	broadleaf trees & shrubs, willow, cherries	June
Fiery Skipper	<i>Hylephila phyleus</i>	grasses	May - September
Gray Hairstreak	<i>Strymon melinus</i>	legumes, mallow, oak	September
Gulf Fritillary	<i>Agraulis vanillae</i>	passion flowers	September - October
Hackberry butterfly	<i>Asterocampa celtis</i>	hackberry (<i>Celtis</i>) sole host plant	May - October
Little Yellow	<i>Eurema lisa</i>	legumes, partridge pea, clover	September - October
Long-tailed Skipper	<i>Urbanus proteus</i>	legumes and other crucifers	August - October
Monarch	<i>Danaus plexippus</i>	milkweeds	August - October
Mourning Cloak	<i>Nymphalis antiopa</i>	willow, elm, hackberry	May
Painted Lady	<i>Vanessa cardui</i>	thistles	October
Palamedes Swallowtail	<i>Pterourus palamedes</i>	red bay, sweet bay, sassafras	May - August
Pipevine Swallowtail	<i>Battus philenor</i>	pipevines	May - June
Queen	<i>Danaus gilippus</i>	milkweeds	June - September
Rare Skipper	<i>Problema bulenta</i>	fresh & brackish estuarine marshes	June
Red Admiral	<i>Vanessa atalanta</i>	nettles, Urticaceae family	September - October
Sachem	<i>Altalopedes campestris</i>	grasses (Poaceae)	May
Skipper (possible Dun)	<i>Euphyes ruricola</i>	nutgrass (chufa), sedge	October
Skipper (possible Little Glassywing)	<i>Pompeius verna</i>	Paspalum, and poas	October
Sleepy Orange	<i>Eurema hicippe</i>	Senna, clovers, legumes	May - October
Southern Skipperling	<i>Copaeodes minima</i>	grasses	June - October
Spicebush Swallowtail	<i>Pterourus troilus</i>	spicebush, sassafras, bay	May - June
un-identified skipper			May
Viceroy	<i>Basilarchia archippus</i>	willows, poplars	August - October
Whirlabout Skipper	<i>Polites vibex</i>	Paspalum & weedy lawn grasses	June - August

Reference: Field Guide to Butterflies - North America, National Audubon Society, Robert Michael Pyle, July 30, 1981

Butterfly Survey - Pinckney Island - May 13, 2001

common name	Ibis pond (1)	Wood stork Pond Field 2	Osprey Field (3)	Big Oak Field (4)	Boat ramp (5)	White Point Field (6)	Old Plantation Road - Residence to Bull Point (7)	Main road (8)	Shell Point Field	Totals
Spicebush Swallowtail	1							2		3
Buckeye	7			8		7				22
Palamedes Swallowtail								1		1
Fiery Skipper	1									1
Hackberry butterfly								4	4	8
Sleepy Orange	3			4					3	10
Pipevine Swallowtail						1				1
Sachem	1									1
Common Checkered Skipper	1									1
Mourning Cloak								3		3
American Lady	2			4				4		10
Carolina Satyr						1				1
un-identified skipper				1						1
Totals	16			17		9		14	7	63
<p>Surveyors: 3 hours Jaret C. Daniels, Ph.D., Butterfly Kingdom Paige and Mary Bess Mulhollan, Refuge Volunteers Allan Flock, Refuge Manager</p> <p>Weather: Sunny, little wind.</p> <p>Note: Woodstork pond field is the next field up from Ibis pond. Osprey pond field is the next field up from Woodstork pond field. You can walk out the back of the field into Osprey pond.</p>										

Butterfly Survey Pinckney Island - June 30, 2001

common name	Ibis pond (1)	Wood stork Pond Field 2	Osprey Field (3)	Big Oak Field (4)	Boat ramp (5)	White Point Field (6)	Old Plantation Road - Residence to Bull Point (7)	Main road (8)	Totals
Southern Skipperling	3	2	3			3		3	14
Whirlabout Skipper	2		2			2			6
Spicebush Swallowtail	1					2		2	5
Buckeye	1					1			2
Queen	1				1				2
Palamedes Swallowtail						1		1	2
Rare Skipper						1			1
Fiery Skipper	3		4			4			11
Hackberry butterfly						1	1	2	4
Sleepy Orange				2			2	1	5
Pipevine Swallowtail							1		1
Eastern Tiger Swallowtail							1		1
Totals	11	2	9	2	1	15	5	9	54
<p>Surveyors: 4 hours Jaret C. Daniels, Ph.D., Butterfly Kingdom Paige and Mary Bess Mulhollan, Refuge Volunteers</p> <p>Weather: No comments. Note: Woodstork pond field is the next field up from Ibis pond. Osprey pond field is the next field up from Woodstork pond field. You can walk out the back of the field into Osprey pond.</p>									

Common Name	Ibis pond (1)	Wood stork Pond Field (2)	Osprey Field (3)	Big Oak Field (4)	Boat ramp (5)	White Point Field (6)	Old Plantation Road - Residence to Bull Point (7)	Main road (8)	Totals
Monarch	1		2						3
Viceroy	1								1
Buckeye	2	2	2						6
Long-tailed Skipper	1		2						3
Whirlabout Skipper			1						1
Fiery Skipper			3						1
Palamedes Swallowtail	1								3
Sleepy Orange	4	5	5						1
Cloudless Sulphur	2	3							14
									5
Totals	12	10	15						37
<p>Surveyors: 3 hours Jaret C. Daniels, Ph.D., Butterfly Kingdom</p> <p>Weather: Inclement, not all areas surveyed.</p> <p>Note: Woodstork pond field is the next field up from Ibis pond. Osprey pond field is the next field up from Woodstork pond field. You can walk out the back of the field into Osprey pond.</p>									

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Monarch	1								1
Viceroy	1								1
Red Admiral	1								1
Buckeye	2						2		4
Carolina Satyr	3		3				3		9
Gulf Fritillary	3		3	3	3	3	3		18
Long-tailed Skipper	1	1				16			18
Gray Hairstreak	1								1
Fiery Skipper						1			1
Little Yellow						1			1
Sleepy Orange							1		1
Cloudless Sulphur							2		2
Totals	13	1	6	3	3	21	11		58
<p>Surveyors: 3 hours Jaret C. Daniels, Ph.D., Butterfly Kingdom Paige and Mary Bess Mulhollan, Refuge Volunteers</p> <p>Weather: Sunny with mixed clouds, very windy</p> <p>Note: Woodstork pond field is the next field up from Ibis pond. Osprey pond field is the next field up from Woodstork pond field. You can walk out the back of the field into Osprey pond.</p>									

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Monarch			1	1					2
Viceroy	2		1						3
Red Admiral	1								1
Painted Lady	1								1
Buckeye	8	2	7	7		8		8	40
Hackberry butterfly			2						2
Gulf Fritillary	10	9	10	13	6	15	7	16	86
Long-tailed Skipper		4		7		5			16
Southern Skipperling				2		2			4
Little Yellow			2	3				2	
Sleepy Orange			3	4		3	3	2	15
Cloudless Sulphur	19	15	19	17	14	31	16	24	155
Skipper (possible Glassywing)	1								1
Skipper (possible Dun)				1					1
Totals	42	30	45	55	20	64	26	52	334
<p>Surveyors: 3 hours Jaret C. Daniels, Ph.D., Butterfly Kingdom Paige and Mary Bess Mulhollan, Refuge Volunteers Allan Flock, Refuge Manager</p> <p>Weather: Sunny no wind.</p> <p>Note: Woodstork pond field is the next field up from Ibis pond. Osprey pond field is the next field up from Woodstork pond field. You can walk out the back of the field into Osprey pond.</p>									