United States Sea Turtle Habitat Texas, Louisiana, Mississippi & Alabama

WIDECAST 2007

Sea Turtle Presence		
Loggerhead Turtle	N, F	
(Caretta caretta)		
Green Turtle N, F		
(Chelonia mydas)	. , , ,	
Leatherback Turtle	F	
(Dermochelys coriacea)	•	
Hawksbill Turtle	IN, F	
(Eretmochelys imbricata)	IIN, F	
Kemp's Ridley Turtle	NE	
(Lepidochelys kempii)	N, F	
Olive Ridley Turtle	^	
(Lepidochelys olivacea)	A	
N = Nesting: F = Foraging: IN = Infrequent Nesting: IF = Infrequent		



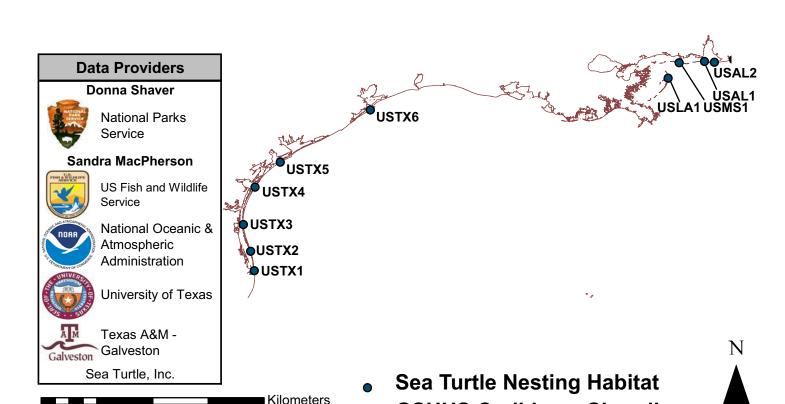
375

500

250

62.5 125

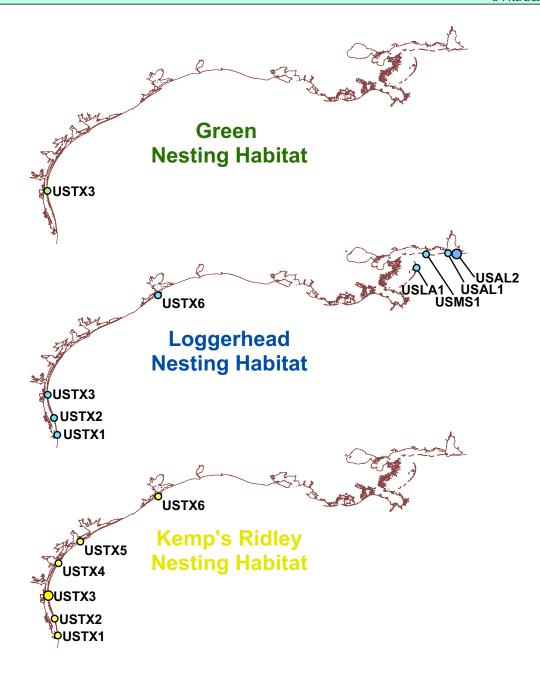
Policy for the Protection of Sea Turtles		
Complete (indefinite) protection	Yes	
Moratorium (fixed period)	_	
Prohibition(s) on take	_	
Closed season	_	
Minimum size limits	_	
Maximum size limits	_	
Annual quota	_	
Permits/licenses required	_	
Gear restrictions	Yes	
Area closures (MPA, park, reserve)	Yes	
Reports of exploitation/sale nationally	No	
Reports of illegal trade internationally	No	
General public awareness of laws	Yes	
Recent prosecutions or penalties No		
Enforcement considered adequate Yes		
Penalties are an adequate deterrent Yes		



GSHHS Caribbean Shoreline

United States Sea Turtle Habitat Texas, Louisiana, Mississippi & Alabama

NIDECAST 2007



Green Nesting Habitat

<25 Crawls per year</p>

Loggerhead Nesting Habitat

- <25 Crawls per year</p>
- O 25-100 Crawls per year

Kemp's Ridley Nesting Habitat

- <25 Crawls per year</p>
- O 25-100 Crawls peryear
- GSHHS Caribbean Shoreline



United States Sea Turtle Habitat Texas, Louisiana, Mississippi & Alabama

Threats to Sea Turtles - Nesting			
Killing of Nesting Females by Humans	Yes (R)	One case - accidental, two cases - visitors attempted to take nesting female but left when deterred by other visitors	
Killing of Nesting Females by Predators	No		
Nest Loss to Predators	Yes (O)	Ghost crabs, coyotes, racoons, badgers and fire ants (invasive)	
Nest Loss to Abiotic Factors	Yes (U)	High tides	
Egg Collection by Humans	Yes (R)		
Harassment Due to Increased Human Presence	Yes (R)		
Artificial Lighting	Yes (R)		
Pollution	Yes (U)	Beach litter/debris	
Beach Erosion/Accretion	Yes (U)	Erosion on Galveston Island; in front of seawalls (North and South Padre Island) and jetties	
Beach Armouring/Stabilization			
Structures	Yes (R)	Nesting is occurring in front of sea walls	
Beach Nourishment	Yes (R)	Galveston Island and elsewhere in front of seawalls, homes, development and on the north side of jetties	
Recreational Beach Equipment		Rare in some areas, frequent in others; turtles seem to	
and/or Other Obstacles	Yes (U)	get around these obstacles	
Mechanized Beach Cleaning	Yes (FA)	In developed areas	
Beach Vehicular Use	Yes (F)		
Sand Mining	No		
Exotic (or Loss of Native)			
Vegetation	No		
Livestock Presence on the			
Beach	No		
R = Rare; O = Occasional; F = Frequent; FA = Frequent in one area; U = Unknown frequency			

Threats to Sea Turtles - Foraging/Migration				
Seagrass Degradation	Yes (R)			
Coral Reef Degradation	NA	No coral reefs present		
Fisheries Bycatch	Yes (O)	Trawls (O), hook and line (O), gillnets (R - illegal in TX)		
Hunting/Poaching	Unknown			
Pollution	Yes (U)	Marine debris		
Predators	Yes (U)	Sharks		
Disease/Parasites	No			
Harassment Due to Increased				
Human Presence	Yes (R)	Due to boat traffic		
Dredging	Yes (O)	In jetty areas and bays		
Marina and Dock Development	Yes (O)			
Boat/Personal Water Craft				
Collisions	Yes (O)			
Power Plant Entrapment	Yes (R)			
Oil and Gas Exploration,				
Development, Transportation	Yes (O)			
Entanglement	Yes (R)	Entangled in rope, fishing line and marine debris		
Offshore Artificial Lighting	Yes (O)			
R = Rare; O = Occasional; F = Frequent; FA = Frequent in one area; U = Unknown frequency				

Dow et al. (2007) ~ Sea Turtle Nesting in the Wider Caribbean Region ~ WIDECAST Technical Report No. 6

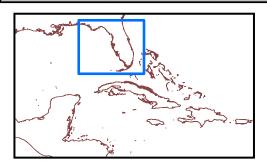
United States Sea Turtle Habitat Texas, Louisiana, Mississippi & Alabama

Beach Identification Codes with Beach Names			
USTX1	Boca Chica Beach	USTX6	Upper Texas Coast
USTX2	South Padre Island	USLA1	Breton National Wildlife Refuge
USTX3	North Padre Island	USMS1	Gulf Islands National Seashore
USTX4	Mustang Island	USAL1	Dauphin Island
USTX5	Matagorda Island	USAL2	Bon Secour National Wildlife Refuge

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Sea Turtle Presence		
Loggerhead Turtle	N, F	
(Caretta caretta)	11, 1	
Green Turtle N, F		
(Chelonia mydas)	IN, F	
Leatherback Turtle	N, F	
(Dermochelys coriacea)	IN, I	
Hawksbill Turtle	IN, F	
(Eretmochelys imbricata)	IIN, F	
Kemp's Ridley Turtle		
(Lepidochelys kempii)	IN, F	
Olive Ridley Turtle		
(Lepidochelys olivacea)		
N = Nesting: F = Foraging: IN = Infrequent Nesting: IF = Infrequent		

N = Nesting; F = Foraging; IN = Infrequent Nesting; IF = Infrequent Foraging; I = Infrequent (further detail unavailable); A = Absent



Policy for the Protection of Sea Turtles		
Complete (indefinite) protection	Yes	
Moratorium (fixed period)	_	
Prohibition(s) on take	_	
Closed season	_	
Minimum size limits	_	
Maximum size limits	_	
Annual quota	_	
Permits/licenses required	Yes*	
Gear restrictions	Yes	
Area closures (MPA, park, reserve)	Yes	
Reports of exploitation/sale nationally	No	
Reports of illegal trade internationally	No	
General public awareness of laws	Yes	
Recent prosecutions or penalties	No	
Enforcement considered adequate Yes		
Penalties are an adequate deterrent Yes		
E = Eggs; N = Nests; NF = Nesting Females; – = Not Applicable; * For research,		

management and construction activities on nesting beaches

USFL1 / USFL5 USFL3 USFL4 USFL6 USFL7

Note

For the purposes of visual representation, individual beach data are aggregated and represented by county. For individual beach data please access the full database through http://seamap.env.duke.edu.

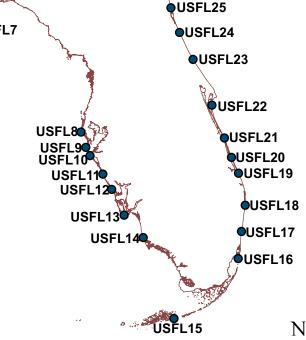
Data Provider

Anne Meylan



Florida Fish and Wildlife Conservation Commission - Fish and Wildlife Research Institute

50 100 200 300 400

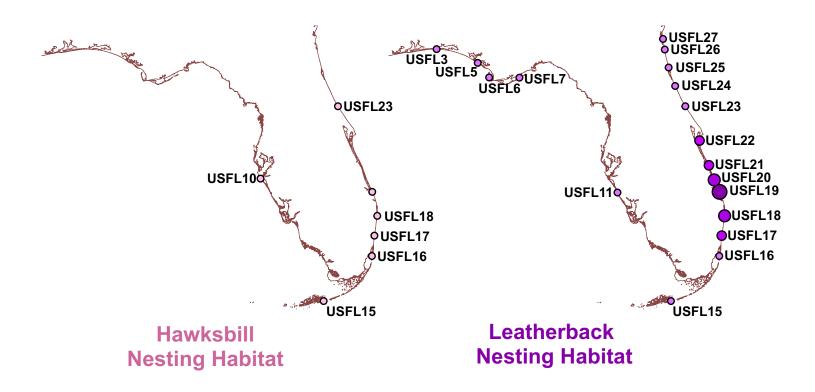


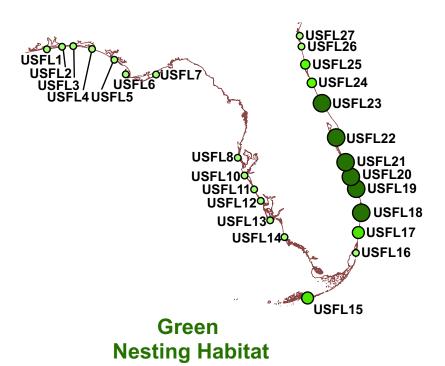
USFL27 USFL26

Sea Turtle Nesting HabitatGSHHS Caribbean Shoreline



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Hawksbill Nesting Habitat

<25 Crawls per year</p>

Leatherback Nesting Habitat

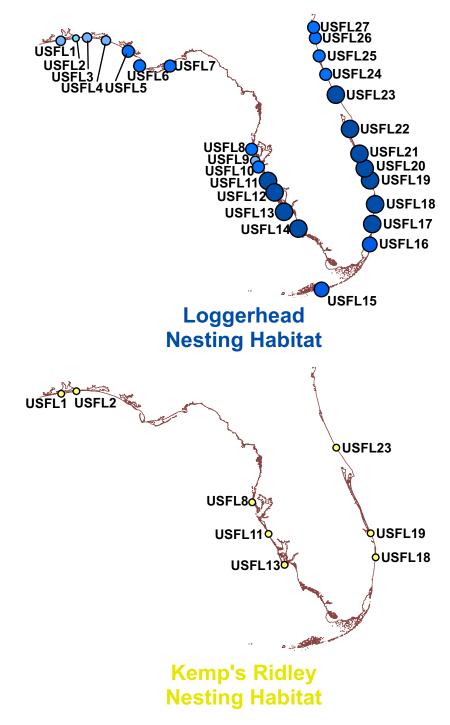
- <25 Crawls per year</p>
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year

Green Nesting Habitat

- <25 Crawls per year</p>
- 25-100 Crawls per year
- 100-500 Crawls per year
- >1000 Crawls per year
 - GSHHS Caribbean Shoreline



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Kemp's Ridley Nesting Habitat

<25 Crawls per year</p>

—— GSHHS Caribbean Shoreline

Loggerhead Nesting Habitat

- <25 Crawls per year</p>
- 25-100 Crawls per year
- 100-500 Crawls per year
- 500-1000 Crawls per year
- >1000 Crawls per year



0 70 140 280 420 560

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Threats to Sea Turtles - Nesting			
Killing of Nesting Females by			
Humans	Yes (R)		
Killing of Nesting Females by			
Predators	Yes (R)		
Nest Loss to Predators	Yes (F)	Racoon, bobcat, coyote, armadillo, fox, crabs and ants	
Nest Loss to Abiotic Factors	Yes (F)	Erosion, tidal inundation and accretion	
Egg Collection by Humans	Yes (R)	Confined to limited areas	
Harassment Due to Increased			
Human Presence	Yes (O)	Mostly due to unguided turtle walks	
Artificial Lighting	Yes (F)	Widespread	
Pollution	Yes (F)	Tar in some areas, beach litter/debris widespread	
Beach Erosion/Accretion	Yes (U)	Erosion in many regions - most cases are in highly developed areas	
Beach Armouring/Stabilization			
Structures	Yes (F)	Present in most coastal counties	
Beach Nourishment	Yes (F)	Widespread	
Recreational Beach Equipment and/or Other Obstacles	Yes (F)	Some counties have ordinances requiring the removal of obstacles at night during nesting season	
Mechanized Beach Cleaning	Yes (F)	Daily in many areas and regulated to occur after nesting surveys completed.	
Beach Vehicular Use	Yes (O/F)	Limited areas open to public use; widespread access for official use	
Sand Mining	No		
Exotic (or Loss of Native)			
Vegetation	Yes (F)	More common in southern Florida than elsewhere in state	
Livestock Presence on the			
Beach	Yes (R)	Horseback riding in limited areas	
R = Rare; O = Occasional; F = Frequent; FA = Frequent in one area; U = Unknown frequency			

Threats to Sea Turtles - Foraging/Migration Anchor damage, vessel groundings, propeller damage, Seagrass Degradation sedimentation and pollution Anchor damage, vessel groundings, propeller damage, bleaching, sedimentation, human recreation impacts and **Coral Reef Degradation** pollution Trawl, hook and line, pot/trap, nets, longlines in adjacent Fisheries Bycatch waters Yes (U) Hunting/Poaching Yes (R) Agriculture, petroleum, sewage, industrial runoff, pollution Pollution and marine debris Yes (F) **Predators** Sharks, other fishes (on hatchlings) Yes (U) Fibropapillomas, epizootics due to unknown causes, Disease/Parasites trematodes **Harassment Due to Increased** Human Presence Yes (F) Boat/personal water craft traffic Associated with channel maintenance and nourishment Yes (F) Marina and Dock Development Yes (F) Increased boat traffic, loss of habitat **Boat/Personal Water Craft** Collisions Yes (F) Most common identifiable anomaly in stranded animals Power Plant Entrapment Yes (F) Most turtles released alive due to monitoring requirements Oil and Gas Exploration, Oil tanker traffic, ballast water flushing and pipeline **Development, Transportation** installation; no nearshore drilling Entanglement Monofilament line, trap line. rope and netting Offshore Artificial Lighting Yes (O) Especially associated with dredging operations R = Rare; O = Occasional; F = Frequent; FA = Frequent in one area; U = Unknown frequency

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Beach Identification Codes with Beach Names			
USFL1	Escambia	USFL15	Monroe
USFL2	Santa Rosa	USFL16	Miami-Dade
USFL3	Okaloosa	USFL17	Broward
USFL4	Walton	USFL18	Palm Beach
USFL5	Bay	USFL19	Martin
USFL6	Gulf	USFL20	St. Lucie
USFL7	Franklin	USFL21	Indian River
USFL8	Pinellas	USFL22	Brevard
USFL9	Hillsborough	USFL23	Volusia
USFL10	Manatee	USFL24	Flagler
USFL11	Sarasota	USFL25	St. Johns
USFL12	Charlotte	USFL26	Duval
USFL13	Lee	USFL27	Nassau
USFL14	Collier		