



Okaloosa County, FL  
Coastal Uplands

Explore the surprising biodiversity of beach dunes with these 37 plants and animals that make up a coastal uplands food web.

This card deck has been developed as part of the Okaloosa SCIENCE project, a collaborative STEM education grant for Okaloosa County School District in northwest Florida. The goals of this project include enhancing scientific literacy, connecting to place, and building community by engaging in hands-on activities.

Find this card deck and more at:  
[education.eol.org/species\\_cards](http://education.eol.org/species_cards)



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### Project Description

## Bitter Panicgrass *Panicum amarum*



Flowering Plants



Okaloosa County, Florida  
+  
Coastal Uplands

Foodweb Role  
AUTO

Height	121-243 cm
Growth Form	Grass
Life Cycle	Perennial
Flower color	Yellow
Sunlight/Soil	Full sun; sandy

IUCN Redlist™  
NE

#### Geographic Range

Along Atlantic and Gulf coasts from Connecticut to northeastern Mexico, Bahamas, Cuba

Image: USDA NRCS PLANTS Database

## Black Skimmer *Rynchops niger*



Birds



Okaloosa County, Florida  
+  
Coastal Uplands

Foodweb Role  
CARN

Adult Weight	212-447 g
Wingspan	112 cm
Lifespan	5-15 yrs
Clutch; Broods	4-5 eggs; 1 brood/yr
Nest Type	Cup on ground

IUCN Redlist™  
LC

#### Geographic Range

Across Nearctic and Neotropical regions, along coasts from New York to Gulf of Mexico, from California through Mexico, across South American coasts and the Caribbean

Image: Marv Elliott CC-BY-NC

## Common Name

### Scientific Name

### Taxon Group

#### Food Web Roles

DECO	Decomposer: Energy from dead material
AUTO	Autotroph: Energy from sun, water, CO <sub>2</sub>
HERB	Herbivore: Energy from plants
OMNI	Omnivore: Energy from plants, animals
CARN	Carnivore: Energy from animals
APEX	Apex Predator: Top predator
DETR	Detritivore: Energy from dead vegetation
SANG	Sanguinivore: Energy from blood
MULT	Multiple: Energy from multiple sources

Habitat (where species is found)  
+ (indicates species is also found in other habitats)

#### Species Conservation Status

##### IUCN Redlist™

International Union for Conservation of Nature

LC	Least Concern
DD	Data Deficient
NT	Near Threatened
EN	Endangered

NE Not Evaluated

VU Vulnerable  
CR Critically Endangered  
EW Extinct in Wild  
EX Extinct



## Cloudless Sulphur *Phoebis sennae*



Insects



Okaloosa County, Florida  
+  
Coastal Uplands

Foodweb Role  
HERB

Wingspan	5.7-8 cm
Development	Complete
Adult Lifespan	1 month (est.)
Number of Eggs	Laid singly
Wings	2 pairs

IUCN Redlist™  
NE

#### Geographic Range

Southeast U.S., Texas, and parts of southwest through Central and South America to Argentina

Image: Linda Gail Price CC-BY-NC



## Cottony Goldenaster

*Chrysopsis gossypina*



Flowering Plants



Okaloosa County, Florida  
+ Coastal Uplands

AUTO

Foodweb  
Role

Height	30-90 cm
Growth Form	Herbaceous
Life Cycle	Perennial
Flower Color	Yellow
Sunlight/Soil	Full/part sun; sandy

IUCN  
Redlist™

NE

### Geographic Range

Endemic to Florida, occur in Walton, Okaloosa, Santa Rosa, + Escambia counties in Florida panhandle

Image: Ron Thomas CC-BY-NC-SA

## Deer Flies

*Chrysops*



Insects



Okaloosa County, Florida  
+ Coastal Uplands

SANG

Foodweb  
Role

Adult Body Length	0.7-1 cm (avg)
Development	Complete
Adult Lifespan	30-60 days (avg)
Number of Eggs	100-1000 eggs/batch
Wings	1 pair

IUCN  
Redlist™

NE

### Geographic Range

Worldwide except Hawaii, Greenland, and Iceland

Image: Biopix CC-BY-NC

## Earleaf Greenbrier

*Smilax auriculata*



Flowering Plants



Okaloosa County, Florida  
+ Coastal Uplands

AUTO

Foodweb  
Role

Height	7-9 m
Growth Form	Vine
Life Cycle	Perennial
Flower Color	Yellow
Sunlight/Soil	Full/part sun; sandy

IUCN  
Redlist™

NE

### Geographic Range

Louisiana, Mississippi, Alabama, Florida, Georgia, North Carolina, South Carolina, Bahamas

Image: Sharpj99 CC-BY-NC-SA

## Eastern Cottontail

*Sylvilagus floridanus*



Mammals



Okaloosa County, Florida  
+ Coastal Uplands

HERB

Foodweb  
Role

Adult Length	39.5-47.7 cm
Adult Weight	0.8-1.5 kg
Lifespan	3-5 yrs
Offspring; Litters	5 (avg); 1-7/yr
Female Maturity	2-3 months

IUCN  
Redlist™

LC

### Geographic Range

Eastern North America, Central America, South America

Image: Phil Myers CC-BY-NC-SA

## Eastern Prickly Pear

*Opuntia humifusa*



Flowering Plants



Okaloosa County, Florida  
+ Coastal Uplands

AUTO

Foodweb  
Role

Height	7.5-10 cm
Growth Form	Cactus
Life Cycle	Perennial
Flower Color	Yellow and red
Sunlight/Soil	Full sun; sandy

IUCN  
Redlist™

NE

### Geographic Range

Atlantic coast from Massachusetts to Georgia, west to Louisiana and north to Arkansas and New York

Image: Steven J. Baskauf CC-BY-NC-SA

## False Rosemary

*Conradina canescens*



Flowering Plants



Okaloosa County, Florida  
+ Coastal Uplands

AUTO

Foodweb  
Role

Height	91-182 cm
Growth Form	Shrub
Leaf Duration	Evergreen
Flower Color	Lavender
Sunlight/Soil	Full sun; sandy

IUCN  
Redlist™

NE

### Geographic Range

Coastal Florida panhandle west to Mississippi

Image: Gerrit Davidse CC-BY-NC-SA



## Fish Crow

*Corvus ossifragus*

eol  
Birds



 Okaloosa County, Florida  
+ Coastal Uplands 

Adult Weight	195-330 g
Wingspan	84 cm
Lifespan	14.5 yrs
Clutch; Broods	2-6 eggs; 1 brood/yr
Nest Type	Cup in tree



**Geographic Range**  
Found from MA south along Atlantic and Gulf coast to southern FL, west to southern TX, and along rivers throughout the east

Image: Peter Radunzel CC-BY-NC

## Florida Rosemary

*Ceratiola ericoides*

eol  
Flowering Plants



 Okaloosa County, Florida  
+ Coastal Uplands 

Height	182-243 cm
Growth Form	Shrub
Leaf Duration	Evergreen
Flower Color	Yellow
Sunlight/Soil	Full sun; sandy



**Geographic Range**  
Atlantic and Gulf coastal plains from South Carolina to Florida panhandle

Image: Riverbanks Outdoor Store New Port Richey, FL CC-BY

## Green Turtle

*Chelonia mydas*

eol  
Reptiles



 Okaloosa County, Florida  
+ Coastal Uplands 

Carapace Length	71-153 cm
Adult Weight	135-150 kg
Lifespan	80-100 yrs
Number of Eggs	100-200 per clutch
Nest Type	Pit in sand



**Geographic Range**  
Tropical, subtropical oceans along coastlines across the world. In North America in Atlantic along coast of eastern US, Caribbean, Gulf of Mexico

Image: Brocken Inaglory CC-BY-SA

## Gulf Bluestem

*Schizachyrium maritimum*

eol  
Flowering Plants



 Okaloosa County, Florida  
+ Coastal Uplands 

Height	30-60 cm
Growth Form	Grass
Life Cycle	Perennial
Flower Color	Silver-ish
Sunlight/Soil	Full sun; sandy



**Geographic Range**  
Coast and islands from Florida panhandle to Louisiana

Image: Mason Brock (Masebrook)

## Gulf Coast Searocket

*Cakile constricta*

eol  
Flowering Plants



 Okaloosa County, Florida  
+ Coastal Uplands 

Height	50 cm
Growth Form	Herbaceous
Life Cycle	Annual
Flower Color	Purple
Sunlight; Soil	Full sun; sandy



**Geographic Range**  
Coastal Florida, Alabama, Mississippi, Louisiana, Texas

Image: Smithsonian Institution, Department of Botany CC-BY-NC-SA

## Hispid Cotton Rat

*Sigmodon hispidus*

eol  
Mammals



 Okaloosa County, Florida  
+ Coastal Uplands 

Adult Length	22.4-36.5 cm
Adult Weight	100-225 g
Lifespan	6-12 months
Offspring; Litters	5-7 (avg); 3-4/yr
Female Maturity	5 months



**Geographic Range**  
North America, Central America, South America

Image: Stephen Pollard CC-BY



## House Mosquito

*Culex tarsalis*



**eol**  
Insects

 Okaloosa County, Florida  
+ Coastal Uplands 

**Adult Body Length** 5.5 mm **Wingspan** 48-53 cm

**Development** Complete **Adult Weight** 30-45 g

**Adult Lifespan** 1-8 weeks **Lifespan** 24 years (max)

**Number of Eggs** 190 (avg) per batch **Clutch; Broods** 2-3 eggs; 1-2/yr

**Wings** 1 pair **Nest Type** Depression in sand

 

**Geographic Range**  
North America

Image: Public Health Image Library

## Least Tern

*Sternula antillarum*



**eol**  
Birds

 Okaloosa County, Florida  
+ Coastal Uplands 

**Wingspan** 48-53 cm **Carapace Length** 145-160 cm

**Adult Weight** 30-45 g **Adult Weight** 250-900 kg

**Lifespan** 24 years (max) **Lifespan** 30 yrs

**Clutch; Broods** 2-3 eggs; 1-2/yr **Number of Eggs** 50-100 per clutch

**Nest Type** Depression in sand **Nest Type** Pit in sand

 

**Geographic Range**  
Coasts of United States, northern South America and Central America; winters from Central America to eastern Brazil

Image: Dick Daniels (<http://carolinabirds.org/>) CC-BY-SA

## Leatherback Sea Turtle

*Dermochelys coriacea*



**eol**  
Reptiles

 Okaloosa County, Florida  
+ Coastal Uplands 

**Carapace Length** 145-160 cm **Geographic Range**  
Temperate and tropical oceans worldwide as far north as Alaska and as far south as South Africa; nests on tropical/subtropical beaches, including FL Gulf Coast

**Adult Weight** 250-900 kg **Adult Weight** 250-900 kg

**Lifespan** 30 yrs **Lifespan** 30 yrs

**Number of Eggs** 50-100 per clutch **Nest Type** Pit in sand

**Nest Type** Pit in sand  

Image: U.S. Fish and Wildlife Service Southeast Region CC-BY

## Loggerhead Sea Turtle

*Caretta caretta*



**eol**  
Reptiles

 Okaloosa County, Florida  
+ Coastal Uplands 

**Carapace Length** 85-100 cm **Height** 21-30 m

**Adult Weight** 77-545 kg **Growth Form** Tree

**Lifespan** 30-62 yrs **Leaf Duration** Evergreen

**Number of Eggs** 110-130 per clutch **Flower Color** White

**Nest Type** Pit in sand **Sunlight; Soil** Part sun; loamy

 

**Geographic Range**  
Found throughout temperate, subtropical, and tropical waters; the largest breeding population found in the southeastern US is from North Carolina through Florida

Image: Brian Gratwicke CC-BY

## Magnolia

*Magnolia grandiflora*



**eol**  
Flowering Plants

 Okaloosa County, Florida  
+ Coastal Uplands 

**Height** 21-30 m **Body Length** 60-95 cm

**Growth Form** Tree **Adult Weight** 6.0 kg (avg)

**Leaf Duration** Evergreen **Lifespan** 5 yrs (avg)

**Flower Color** White **Offspring; Litters** 4 (avg); 1/yr

**Sunlight; Soil** Part sun; loamy **Female Maturity** 8-12 months

 

**Geographic Range**  
Atlantic coast from North Carolina to central Florida, southern Georgia, Alabama, Mississippi, Louisiana, Texas

Image: Ivo Antušek

## Northern Raccoon

*Procyon lotor*



**eol**  
Mammals

 Okaloosa County, Florida  
+ Coastal Uplands 

**Body Length** 60-95 cm **Geographic Range**  
Native from southern Canada to northern South America, introduced in Europe and central Asia

**Adult Weight** 6.0 kg (avg) **Adult Weight** 6.0 kg (avg)

**Lifespan** 5 yrs (avg) **Offspring; Litters** 4 (avg); 1/yr

**Female Maturity** 8-12 months  

Image: Arthur Chapman CC-BY-NC-SA



## Oldfield Mouse

*Peromyscus polionotus*

eol  
Mammals



**OMNI**

 Okaloosa County, Florida  
+ Coastal Uplands 

Adult Length	10-15 cm
Adult Weight	10-15 g
Lifespan	1.5-5.5 yrs
Offspring; Litters	3-4; 1+/yr
Female Maturity	28 days

**IUCN Redlist™** LC

**Geographic Range**  
Southeastern U.S. from northeastern MS, to western SC, south through GA, AL, and FL, including eight subspecies along Gulf coast and peninsular FL

Image: Jackie Isaacs/USFWS

## Peregrine Falcon

*Falco peregrinus*

eol  
Birds



**CARN**

 Okaloosa County, Florida  
+ Coastal Uplands 

Wingspan	100-110 cm
Adult Weight	530-1,600 g
Life span	13-20 yrs
Clutch Size	2-5 eggs; 1 brood/yr
Nest Type	Cliff edge

**IUCN Redlist™** LC

**Geographic Range**  
Found in most biomes except high mountains, some deserts, and tropical forests; on all continents except Antarctica

Image: 2002 California Academy of Sciences CC-BY-NC-SA

## Red Fox

*Vulpes vulpes*

eol  
Mammals



**OMNI**

 Okaloosa County, Florida  
+ Coastal Uplands 

Adult Length	46-90 cm
Adult Weight	3-14 kg
Lifespan	3-7 yrs
Offspring; Litters	1-9; 1/yr
Female Maturity	10 months

**IUCN Redlist™** LC

**Geographic Range**  
North America, Central America, South America, Asia, and Africa

Image: Wikimedia Commons

## Sand Live Oak

*Quercus geminata*

eol  
Flowering Plants



**AUTO**

 Okaloosa County, Florida  
+ Coastal Uplands 

Height	15-28 m
Growth Form	Tree
Leaf Duration	Evergreen
Flower Color	Green or brown
Sunlight; Soil	Full-part sun; sandy

**IUCN Redlist™** NE

**Geographic Range**  
Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina

Image: Homer Edward Price CC-BY

## Savannah Sparrow

*Passerculus sandwichensis*

eol  
Birds



**OMNI**

 Okaloosa County, Florida  
+ Coastal Uplands 

Wingspan	20-22 cm
Adult Weight	15-28 g
Lifespan	6 yrs
Clutch; Broods	2-6 eggs; 1-4/yr
Nest Type	Cup on ground

**IUCN Redlist™** LC

**Geographic Range**  
Long distance migrant, found throughout North America seasonally, northern breeding range and southern non-breeding range

Image: CONABIO CC-BY-NC-SA

## Saw Palmetto

*Serenoa repens*

eol  
Flowering Plants



**AUTO**

 Okaloosa County, Florida  
+ Coastal Uplands 

Height	154-304 cm
Growth Form	Shrub
Leaf Duration	Evergreen
Flower Color	Yellow
Sunlight; Soil	Full-part sun; sandy

**IUCN Redlist™** NE

**Geographic Range**  
Alabama, Florida, Georgia, South Carolina, Louisiana, Mississippi

Image: oakum CC-BY-NC-SA



## Sea Oats

*Uniola paniculata*

eol  
Flowering Plants



**AUTO**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Height	152-243 cm
Growth Form	Grass
Life Cycle	Perennial
Flower Color	White
Sunlight; Soil	Full sun; sandy

**NE**  
IUCN Redlist™

**Geographic Range**  
Atlantic and Gulf coast and barrier islands from Virginia to Florida, Texas, Mexico, Bahamas, and Cuba

Image: Sharp99 CC-BY-NC-SA

## Seacoast Marshelder

*Iva imbricata*

eol  
Flowering Plants



**AUTO**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Height	30-50 cm
Growth Form	Herbaceous
Life Cycle	Perennial
Flower Color	Green
Sunlight; Soil	Sandy

**NE**  
IUCN Redlist™

**Geographic Range**  
Southeastern U.S. coast from Virginia to coastal Texas and Caribbean

Image: Jason Sharp CC-BY-NC-SA

## Showy Partridgepea

*\*Chamaecrista fasciata*

eol  
Flowering Plants



**AUTO**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Height	30-90 cm
Growth Form	Herbaceous
Life Cycle	Annual
Flower Color	Yellow
Sunlight/Soil	Full sun; sandy/loam

**NE**  
IUCN Redlist™

**Geographic Range**  
Massachusetts south through Florida, along gulf coast to eastern Texas, and north to Minnesota

\**Chamaecrista fasciata*

Image: Mary Keim CC-BY-NC-SA

## Six-lined Racerunner

*Cnemidophorus sexlineatus*

eol  
Reptiles



**CARN**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Snout-vent Length	75 mm
Adult Weight	200 g
Lifespan	6 yrs
Number of Eggs	4-6 per clutch
Activity	Diurnal

**NE**  
IUCN Redlist™

**Geographic Range**  
Maryland to Florida, north to Wisconsin, eastern Wyoming, Colorado, New Mexico, to southern Texas and through Gulf Coast

Image: 2011 Todd Pierson CC-BY-NC-SA

## Snowy Plover

*Charadrius nivosus*

eol  
Birds



**CARN**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Wingspan	34 cm
Adult Weight	34-58 g
Lifespan	3-15 yrs
Clutch; Broods	2-6 eggs; 2/yr
Nest Type	Depression in ground

**NT**  
IUCN Redlist™

**Geographic Range**  
North America, Central America, western South America, Caribbean coastal habitats and inland water bodies

Image: Mike Baird CC-BY

## Squirrel Treefrog

*Hyla squirella*

eol  
Amphibians



**CARN**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

Snout-vent Length	2.3-3.7cm
Adult Weight	0.24-0.48 g
Lifespan	8.5 yrs
Number of Eggs	1,000 per clutch
Activity	Nocturnal

**LC**  
IUCN Redlist™

**Geographic Range**  
Eastern coastal plain from Virginia to Florida and along Gulf coast to southeastern Texas, introduced in Bahamas

Image: 2011 Todd Pierson CC-BY-NC-SA



## Festive Tiger Beetle *Cicindela scutellaris*

eol  
Insects



**CARN**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

**Adult Length** 1.1-1.4 cm  
**Development** Incomplete  
**Adult Lifespan** 2 years (max)  
**Number of Eggs** 50 per season  
**Wings** 2 pairs

**IUCN Redlist™** NE

**Geographic Range**  
Central and Eastern North America

Image: Mary Keim CC-BY-NC-SA

## Velvet Ant *Dasymutilla occidentalis*

eol  
Insects



**OMNI**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

**Adult Body Length** 1.5-2.5 cm  
**Development** Complete  
**Adult Lifespan** 1 year (max)  
**Number of Eggs** 1-2 per host  
**Wings** 2 pairs (male only)

**IUCN Redlist™** NE

**Geographic Range**  
Connecticut south to Florida, west to Texas and north to Colorado

Image: Mary Keim CC-BY-NC-SA

## Virginia Opossum *Didelphis virginiana*

eol  
Mammals



**OMNI**  
Okaloosa County, Florida  
+ Coastal Uplands Foodweb Role

**Adult Length** 35-55 cm  
**Adult Weight** 1.9-6 kg  
**Lifespan** 1.5-2.5 yrs  
**Offspring; Litters** 4-25; 1-3/yr  
**Female Maturity** 184 days

**IUCN Redlist™** LC

**Geographic Range**  
Southeastern Canada, Eastern U.S. to Rocky Mountains, Central America

Image: 1999 California Academy of Sciences CC-BY-NC-SA

### eol species cards

**Adaptation:** A physical characteristic or behavior that helps an organism survive in its environment

**Brood/Litter:** Group of young produced at one time

**Carapace:** Shell of a turtle or head and thorax of arthropods

**Clutch Size:** Number of eggs laid in a nest at one time

**Complete Metamorphosis:** Some insects have a four stage life cycle: egg, larva, pupa, adult

**Crepuscular:** Active at dawn and dusk

**Diurnal:** Active during the day

### Vocabulary

### eol species cards

**Habitat:** The area an organism lives and can find its resources

**Growth Form:** Classification of plants as trees, shrubs, herbaceous, and grasses

**Incomplete Metamorphosis:** Some insects have a three stage life cycle: eggs, nymph, adult

**Molt:** The act of shedding exoskeleton, skin or feathers as an animal grows

**Snout-vent Length:** In amphibians and reptiles, the length from tip of nose to tail base (cloaca)

**Standard Length:** In fishes, length from tip of snout to end of last vertebra

### Vocabulary

