APPENDIX B: {version3. 7/10/07}

# Everglades and Dry Tortugas National Parks
# South Florida Natural Resources Center Information Resources
# Metadata Catalog Form- Example

(Information detailing digital spatial, biological, physical, and/or modeling data)

Supply a digital version (.txt or .doc) of the following form for each data set. The numbers in brackets after each field name indicate the character limit for that field. All fields must be completed if applicable or record N/A.

**NPS Information:** FGDC Section 0

**1. Unit code for Park(s):** EVER **X** DRTO____BISC___BICY____

Everglades National Park EVER
Dry Tortugas National Park DRTO
Biscayne National Park BISC
Big Cypress National Preserve BICY

**2. List the applicable Identification Numbers associated with your project**
SFNRC Project ID: (20)# **FY99-Research-013** and/or
EVER Museum Accession:
EVER Permit:
NPS Cooperative or Interagency Agreement:
National Park Service Funding Source:

**Identification Information:** FGDC Section 1

**3. Originator:** Indicate the party responsible for the data set. This is most commonly the organization that developed the data set. If a contractor developed the data set include the information below. Who are the project participants including; the project lead or principal investigator (PI), COTR and project participants.

**Investigator Name**
**Institution**
**Institution Address**
**Investigator Phone**
**Investigator Fax**
**E-mail**

**Investigator Name**
**Institution**
**Institution Address**
**Investigator Phone**
**Investigator Fax**
**E-mail**

**4. National Park Service Representative** (**COTR)** name if applicable:

**Sonny Bass, Wildlife Biologist Everglades National Park**

**5. List other contractors or organizations** or individuals whom should get credit for data collection and/or analysis?

**Cooperator Name**
**Institution**
**Institution Address**
**Cooperator Phone**
**Cooperator Fax**
**E-mail**

**Cooperator Name**
**Institution**
**Institution Address**
**Cooperator Phone**
**Cooperator Fax**
**E-mail**

**6. Publication Date:** The date that the data was published or otherwise made available, use the format: year, month, day:

**2003**

**7. Data set Title (90):** What is the title of the project or data set?

**Status and Conservation of the American Crocodile in Florida: Recovering an Endangered Species While Restoring an Endangered Ecosystem**

**8. Data Type:** The *data type* is the physical (i.e., analog) or digital medium in which the data exist. For identification of the data type in the data set catalog, one of the acronym codes below may be used (see instructions for details):

**Unorganized Database (e.g., unsorted files, etc.) DIGDB**

**9. Publishing:** Will the data set, project, and/or research (or resulting analysis) be published or part of a larger publication? If so, what is the reference, **series name and issue identification**?

**Mazzotti, F.J. and M.S. Cherkiss. 2003. Status and Conservation of the American Crocodile in Florida: Recovering an Endangered Species While Restoring an Endangered Ecosystem. University of Florida, Ft. Lauderdale Research and Education Center. Tech. Rep. 2003. 41 pp.**

**10. Publication place:**

**University of Florida, Ft. Lauderdale Research and Education Center.**

**11. NPS Nature Bibliography Identification** (NatureBIB ID) number (optional):

**N/A**

**12. Online Linkage:** Full data distribution URL if the **data** are available online anywhere.

**N/A**

**13. Online Linkage:** Full URL if the **report** is available online anywhere.
Link URL:
**N/A**

**14.** If the data is available on the **SFNRC Share Drive or Oracle Server**, what is the path name?
**N/A**

**15. Abstract** (250): Include a concise description of the data.

**This is a summary of the total number of crocodile nests, successful nests, and hatchlings marked or the three nesting colonies in South Florida. Including: Growth and survival of the American crocodile in South Florida. American crocodile nesting success and predation on artificial and natural substrates in Everglades National Park over a 30 year period. Dispersal of crocodiles from the three nesting colonies in South Florida. Relative risks for crocodiles at three nesting colonies in South Florida. Relocation information for the American Crocodile in South Florida. Mortality information for the American Crocodile from 1997-2001. Hurricanes and tropical storms impacting crocodile habitat in South Florida 1975-2001.**

**16. Purpose:** A summary of the intentions for developing the dataset

**No new data was collected for this project. The data compiled and summarized in this report is the result of more than 25 years of research and monitoring of the American crocodile in Florida sponsored by the U.S. Department of the Interior, U.S. Army Corps of Engineers, the Florida Fish and Wildlife Conservation Commission and Florida Power and Light Company.**

1. **Compile and provide databases on captures and nests of the American crocodile in Florida in a format compatible with National Park Service standards.**
2. **Identify and describe access to relevant regional environmental databases (e.g. rainfall, water levels, and salinities).**
3. **Identify and describe population and habitat models for American crocodiles in Florida.**
4. **Evaluate databases for long-term trends and between site comparisons.**
5. **Make recommendations for restoration success criteria and endangered species recovery.**
6. **Recommend standardized protocols for research and monitoring.**

**17. Methods** (250)**:** Briefly summarize your field and laboratory methods (cut & paste from other documents! If you used existing protocols or methods, list the references).

***Historical Data Sets.* -- A list of historic and current alligator projects and data sets will be compiled by sending a questionnaire to FFWCC, NPS, USFWS, University researchers, and private consultants who are currently or who have conducted research on alligators in south Florida. The questionnaire will ask for the project title, type of data, project dates, project PIs and current addresses, location and**

**form of data (e.g. field notes, computer file etc.), and a list of reports in which the data are used. Each project will be evaluated as to the relevance of the data to restoration success criteria, modeling, and monitoring efforts, the amount of data, and the effort needed to get the data into a usable form. Based on the above information the projects will be ranked in order of importance.**

**18. Collection** (140)**:**
Will the data be developed primarily through:

a) Field visits?

b) Remote instrumentation (*i.e.* temperature recorders, etc)?

c) Existing data sources (please list)?

d) Other (explain) **This was a data mining project: Florida Fish and Wildlife Conservation Commission, Florida Power and Light Turkey Point and University of Florida**

**19. Online Linkage for metadata file:** Full URL for the **metadata** file if it is available online anywhere.
**N/A**

**20. Time period of Content:** The relevant date(s) of the data content. For example the data may have been gathered in June but the report was not completed and published until February. Use the format: year, month, day

Begin Date: **1975** End Date: **2001**

Multiple Dates (140):

**21. Progress:** Planned In-work **Complete**

**22. Update Frequency:** Continually __ Daily __ Weekly __ Monthly __ Annually __
As Needed__ Biannually __ Irregular __ None Planned __ **Unknown X**

**23. Spatial Domain of Dataset:** Approximate center of the study area must be determined.

1. **West_Bounding_Coordinate: -81.30333**
   **East_Bounding_Coordinate: -80.262125**
   **North_Bounding_Coordinate: 25.847113**
   **South_Bounding_Coordinate: 24.696994**

**Coverage** (6) of Everglades National Park:
In
Out
In&Out **X Wetland systems of South Florida**
Other

**24. Layers Table or Layer Names. (200).** For a composite data set of several Geographic Information System (GIS) layers **or database tables**, the names of the multiple data record types may be listed. This field allows composite data sets to be listed as a coherent unit in the catalog without separate entries, but careful documentation of all tables/layers is essential for this scheme to be practical and useful for future reference.

**DATA DICTIONARY CROC_datadic.doc**

**Florida Fish and Wildlife Conservation Commission:**
**Capture File (FWC CAP), Table 2**

- **CLIP- By the clipping of tail scutes in a prescribed manner, each crocodile was given an individual identification number.**
- **OWNER (DR)- Represents the institution responsible for marking the crocodile, where DR is the double right tail scute. An eight in this field means that Paul Moler or someone under his supervision marked the crocodile (Figure 1).**
- **S/DL/DR- Represents the specific tail scutes that were cut on each individual. The S stands for the single row of scutes, DL and DR represent the double left and right rows of tail scutes, respectively (Figure 1).**

**Ex. Clip=000206 and was caught by FWC. The eighth (8) double right scute would be cut to denote this. To represent the #000206 the sixth (6) double right scute, second (2) double left scute and no single scutes would be cut.**

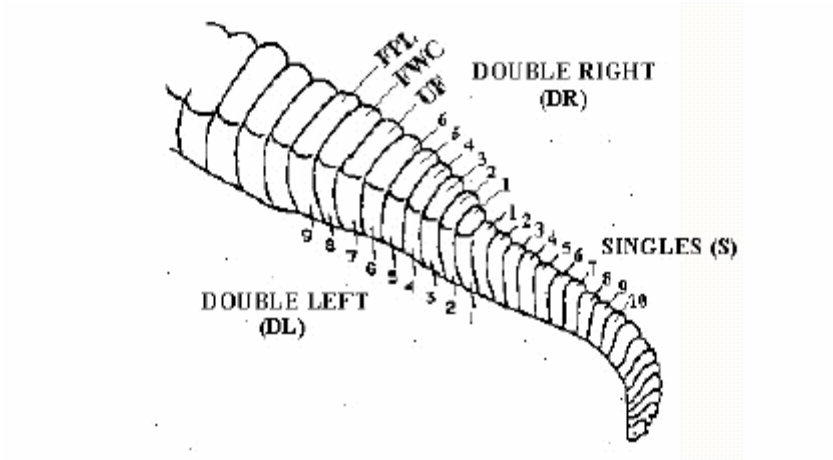


Figure 1. Scute configuration used with FWC captures.

- **TOE_TAG- This method of marking was not used by the FWC, therefore this field will have no data (ND).**
- **DATE- The date the crocodile was captured.**
- **HATCHLING- A yes or no indicates whether or not the animal captured was a hatchling.**
- **RECAPTURE- A yes or no indicates whether or not the animal has been previously captured.**
- **HATCH_DATE- If present, this indicates the hatching date.**
- **LOCATION- This denotes the specific location where the crocodile was captured.**
- **TL_CM- Total length (TL), measured in centimeters, from the tip of the snout to the tip of the tail on the ventral side.**
- **SVL_CM- Snout vent length (SVL), measured in centimeters, from the tip of the snout to the posterior end of the cloacal vent.**
- **MASS_G- Total weight of the crocodile, measured with a Pesola scale and recorded in grams.**
- **AIR- Temperature of the air at the site of capture, measured in degrees Celsius.**
- **WATER- Temperature of the water surface, at the site of capture, measured in degrees Celsius.**
- **SALINITY- Salinity of the water surface, measured with a hand refractometer on a scale of 0–100 ppt (parts per thousand).**
- **SEX- Determined by probing the cloaca.**
- **NEST- If present, represents the nest the crocodile hatched out of.**
- **COMMENTS- Information that was recorded at the time of capture, this can include physical characteristics of the animal captured and/or environment.**

**Nest File (FWC NEST), Table 3**

- **YEAR- Year the nest was active.**
- **LOCATION- Location of the nests monitored. For this file all nests are from CLNWR.**
- **TOTAL # NESTS- Total number of nests observed in a particular year.**
- **# Successful Nests- Number of successful nests in a particular year.**
- **# Hatchlings Marked- Number of hatchlings marked in a particular year, from all nests.**
- **Owner- Represents who found and monitored the nests. The following codes were used for each of the institutions involved in monitoring: Frank Mazzotti (University of Florida), 7, Paul Moler (Florida Fish and Wildlife Conservation Commission), 8 and at the Turkey Point Power Plant, 9.**

**Abbreviations**

| ABBREVIATION | STANDS FOR |
|---|---|
| BHH | BASIN HILLS |
| BHM | BASIN HILLS MAIN |
| BHN | BASIN HILLS NORTH |
| BHS | BASIN HILLS SOUTH |
| CNL | CANAL |
| CRL | CROCODILE LAKE |
| CSC | CARD SOUND CANAL |
| CSR | CARD SOUND ROAD |
| DAN | DANIA |
| DOR | DEAD ON ROAD |
| DRB | DEERING BAY |
| ENT | ENTRANCE |
| OCR | OCEAN REEF |
| SCC | SNAPPER CREEK CANAL |
| SHO | SHORELINE |
| TPP | TURKEY POINT |

**Turkey Point (TP) Power Plant, Florida Power and Light**

**Capture File (TP CAP), Table 4**

- **CLIP- By the clipping of tail scutes in a prescribed manner, each crocodile was given an individual identification number. This is true for captures during the period from 1978 to 1997. From 1997 to the present this field corresponds to a numbered pit tag that was inserted under the skin. In addition to the pit tag, each crocodile was also scute clipped with a cohort mark, denoting the year it was first marked (Figure 1).**
- **OWNER (DR)- Represents the institution responsible for marking the crocodile, where DR is the double right tail scute. A nine in this field means the crocodile was marked by an individual from the Turkey Point Power Plant (Figure 1).**
- **S/DL/DR- Represents the specific tail scutes that were cut on each individual. For the years from 1978 – 1997 the S stands for the single row of scutes, DL and DR represent the double left (10's) and double right (100's) rows of tail scutes, respectively. From 1997 on, the DL, DR and S scutes represent the cohort (year) the crocodile was captured and marked (Figure 1).**

**Ex.1 from 1979-1997, clip=355 was caught by the Turkey Point staff, the ninth (900)double right scute would be cut to denote this. To represent the #355 the third (300) double right scute, fifth (50) double left scute and the fifth (5) single scute would be cut. Ex.2 for animals captured from 1997 on, cohort 1997, the ninth (90) DL, ninth (900) DR and the seventh (7) S would be cut.**

- **TOE_TAG- This method of marking was not used by TP, so this field will have no data (ND).**
- **DATE- The date the crocodile was captured.**
- **HATCHLING- A yes or no indicates whether or not the animal captured was a hatchling.**
- **RECAPTURE- A yes or no indicates whether or not the animal had been previously captured.**
- **HATCH_DATE- If present, this indicates the hatching date.**
- **LOCATION- Denotes the specific location where the crocodile was captured. For this database, the abbreviations are read as follows. Example: B26SXN5, would be read as Berm 26 section 5.**
- **TL_CM- Total length (TL), measured in centimeters, from the tip of the snout to the tip of the tail, on the ventral side.**
- **SVL_CM- Snout vent length (SVL), measured in centimeters, from the tip of the snout to the posterior end of the cloacal vent.**

- **MASS_G- Total weight of the crocodile, measured with a Pesola scale and recorded in grams.**
- **AIR- Temperature of the air at the site of capture, measured in degrees Celsius.**
- **WATER- Temperature of the water surface, at the site of capture, measured in degrees Celsius.**
- **SALINITY- Salinity of the water surface, measured with a hand refractometer on a scale of 0–100 ppt (parts per thousand).**
- **SEX- Determined by probing the cloaca.**
- **NEST- If present, this represents the nest the crocodile hatched out of.**
- **COMMENTS- Information that was recorded at the time of capture, this can include physical characteristics of the animal captured and/or environment.**

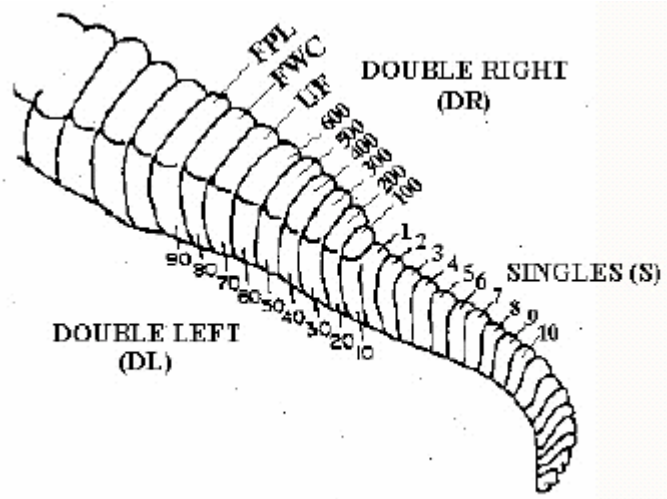


Figure 1. Scute configuration used with FPL captures.

**Nest File (TP NEST), Table 5**

- **NEST ID- Nests are given an identification number, this corresponds to either the year the nest was monitored or the location of the nest.**
- **OWNER- Represents who found and monitored each nest. The following codes were used for each of the institutions involved in monitoring: Frank Mazzotti (University of Florida), 7, Paul Moler (Florida Fish and Wildlife Conservation Commission), 8 and at the Turkey Point Power Plant, 9.**
- **YEAR- The year the nest was active.**
- **LOCATION- The location of the nest site. For this database, the abbreviations are read as in the following. Example: B26SXN5, would be Berm 26 section 5. The berms are numbered from 1 - 31 counting from right to left.**
- **FATE- Indicates the fate of the nest. The following were used to represent a successful (S) nest, a failed (F) nest and a depredated (P) nest.**

**Abbreviations**

| ABBREVIATION | STANDS FOR |
|---|---|
| B | BERM |
| BAY | BISCAYNE BAY |
| BSI | BOY SCOUT ISLAND |
| CNL | CANAL |
| C106 | C-106 |
| C107 | C-107 |
| CANA | OTHER CANALS |

| | |
|---|---|
| CCS | CANAL COOLING SYSTEM |
| CSC | CARD SOUND CANAL |
| DC | DISCHARGE CANAL |
| EFC | EAST FINGER CANAL |
| GC | GRAND CANAL |
| ISL | ISLAND |
| ID | INTERCEPTOR DITCH |
| L31 | L-31 |
| LSP | L-SHAPED POND |
| MISC | MISCELLANEOUS |
| MLCN | MODEL LAND CANAL NORTH |
| MLCS | MODEL LAND CANAL SOUTH |
| MLLE | MODEL LAND CANAL EAST |
| MOAT | MOAT |
| MTC | MET TOWER CANAL |
| MTR | MET TOWER ROAD |
| NC | NORTH COLLECTOR |
| NEST | NEST SITE SURVEY |
| NPS | NORTH PUMP STATION |
| NTC | NORTH TEASE CANAL |
| PDC | PALM DRIVE CANAL |
| POC | POINT OF CAPTURE |
| RC | RETURN CANALS |
| S20A | S-20-A |
| SANCT | SANCTUARY AREA |
| SC | SOUTH COLLECTOR |
| SDC | SEA-DADE CANAL |
| SID | SOUTH INTERCEPTOR DITCH |
| SPS | SOUTH PUMP STATION |
| STC | SOUTH TEASE CANAL |
| SXN | SECTION |
| TC | TEST CANALS |
| TUR | TURTLE POINT |
| WFC | WEST FINGER CANAL |
| YOY | YOUNG OF YEAR |

**University of Florida**

**Capture File (UF CAP), Table 6**

- **CLIP- By the clipping of tail scutes in a prescribed manner, each crocodile was given an individual identification number. The individual identification numbers for the UF captures follow a counting format. For the period 1978 – 1979 marking was done according to the illustration below (Figure 1). Starting in 1980 scutes were cut in a different configuration, which is currently in use today (Figure 2).**
- **OWNER (DR)- Represents the institution responsible for marking the crocodile, where DR is the double right tail scute. A seven in this field means that Frank Mazzotti or someone under his supervision marked the crocodile (Figure 2).**
- **S/DL/DR- Represents the specific tail scutes that were cut on each individual. The S stands for the single row of scutes, DL and DR represent the double left (10's) and right (100's) rows of tail scutes (Figure 2). Ex. Clip=355 and was caught by UF/National Park Service. The seventh (700) double right scute would be cut to denote this. To represent the #355 the third (300) double right scute, the fifth (50) double left scute and the fifth (5) single scute would be cut as well. The tenth (10) single scute was cut to denote numbers that are in the one thousands.**

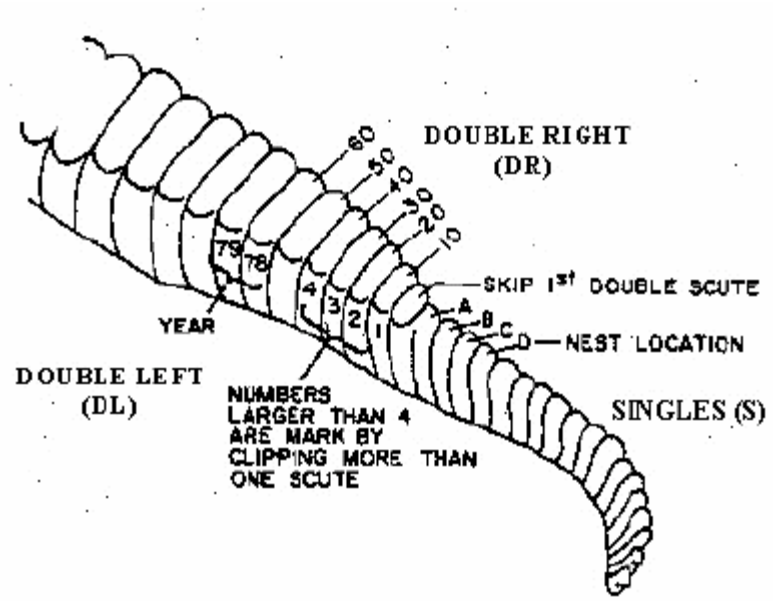


Figure 1. Scute configuration used with UF captures for 1978 – 1979.

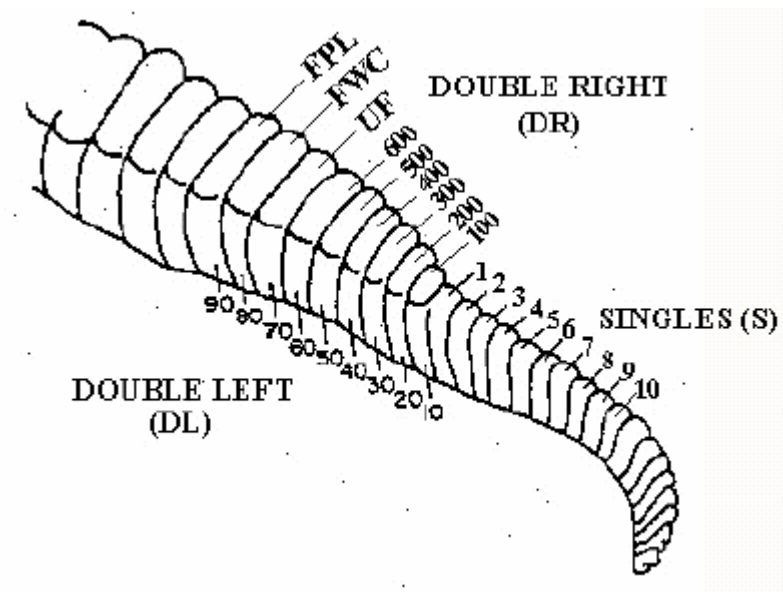


Figure 2. Scute configuration used for UF captures 1979 to the present.

- **TOE_TAG- Originally crocodiles were marked with an external numbered tag in the webbing of the foot in addition to the cutting of scutes. However, this no longer occurs and therefore no data (ND) will be present in this field for most of the capture database.**
- **DATE- The date the crocodile was captured.**
- **HATCHLING- A yes or no indicates whether or not the animal captured was a hatchling.**
- **RECAPTURE- A yes or no indicates whether or not the animal had been previously captured.**
- **HATCH_DATE- If present, this indicates the hatching date.**
- **LOCATION- This indicates the specific location where the crocodile was captured.**

- **TL_CM- Total length (TL), measured in centimeters, from the tip of the snout to the tip of the tail, on the ventral side.**
- **SVL_CM- Snout vent length (SVL), measured in centimeters, from the tip of the snout to the posterior end of the cloacal vent.**
- **MASS_G- Total weight of the crocodile measured with a Pesola scale and recorded in grams.**
- **AIR- Temperature of the air at the site of capture, measured in degrees Celsius.**
- **WATER- Temperature of the water surface, at the site of capture, measured in degrees Celsius.**
- **SALINITY- Salinity of the water surface, measured with a hand refractometer on a scale of 0–100 ppt (parts per thousand).**
- **SEX- Determined by probing the cloaca.**
- **NEST- If present, this represents the nest the crocodile hatched out of.**
- **COMMENTS- Information that was recorded at the time of capture, this can include physical characteristics of the animal captured and/or environment.**

**Nest File (UF NEST), Table 7**

- **NEST ID- Nests are named for their location.**
- **OWNER- Represents who found and monitored each nest. The following codes were used for each of the institutions involved in monitoring: Frank Mazzotti (University of Florida), 7, Paul Moler (Florida Fish and Wildlife Conservation Commission), 8 and at the Turkey Point Power Plant, 9.**
- **YEAR- The year the nest was active.**
- **LOCATION- The location of the nest site.**
- **FATE- Indicates the fate of the nest. The following were used to represent a successful (S) nest, a failed (F) nest and a depredated (P) nest.**

**Helicopter Survey Files (UF HELI), Table 8**

- **DATE- The date of the helicopter survey.**
- **TIME- The time of the survey.**
- **LOCATION- The specific location of the survey.**
- **SIZE (m)- The size of the crocodile observed, in meters.**
- **TYPE OF SURVEY- Type of transportation used for the survey.**
- **HABITAT- A description of the specific habitat surveyed.**
- **AIR TEMP (C)- Temperature of the air at the site of the survey, measured in degrees Celsius.**
- **H20 TEMP (C)- Temperature of the water surface, at the site of the survey, measured in degrees Celsius.**
- **WAVES (cm)- Height (top of wave to bottom of trough) of the waves, estimated in centimeters.**
- **SALINITY (ppt)- Salinity of the water surface, measured with a hand refractometer, on a scale of 0–100 ppt (parts per thousand).**
- **H20 DEPTH (m)- Depth of the water at the survey site measured in meters.**
- **COMMENTS- Any information that was recorded at the site of the survey.**

**Egg File (UF EGG), Table 9**

- **DATE- The date of the nest survey**
- **NEST- The specific location of the nest**
- **LENGTH (mm)- Length of the egg in millimeters**

- **WIDTH(mm) – Width of the egg in millimeters.**
- **WEIGHT (g)- Weight of the egg in grams.**
- **SALINITY (ppt)- Salinity of the water surface, measured with a hand refractometer, on a scale of 0–100 ppt (parts per thousand).**
- **H20 TEMP (C)- Temperature of the water adjacent to the nest, measured in degrees Celsius.**
- **H20 DEPTH (cm)- Water depth adjacent to the nest, measured in centimeters.**
- **WAVES - Wave action**
- **WIND SPEED (mph)- Wind speed, measured in miles per hour and direction.**
- **COMMENTS- Any information that was recorded at the site of the nest.**
- **COLLECTOR- Individual who collected data.**

**Abbreviations**

| ABBREVIATION | STANDS FOR |
|---|---|
| AHP | ARGYLE HENRY POND |
| ALB | ALLIGATOR BAY |
| BBB | BLACK BETSY BEACH |
| BBH | BLACK BETSY HOLE |
| BBK | BLACK BETSY KEY |
| BBP | BLACK BETSY POINT |
| BDI | BIRD ISLAND |
| BRL | BEAR LAKE |
| BRR | BEAR LAKE ROAD |
| BRS | BARNES SOUND |
| BWC | BUTTONWOOD CANAL |
| CAS | CAPE SABLE |
| CCB | COCOA BEACH |
| CCP | COCOA POINT |
| CDC | CARD SOUND CANAL |
| CDS | CARD SOUND |
| CHB | CHAPMAN FIELD BORROW PIT |
| CHC | CHAPMAN FIELD CANAL |
| CHF | CHAPMAN FIELD |
| CLB | CLUBHOUSE BEACH |
| CLK | CLUB KEY |
| CNL | CANAL |
| COB | COOT BAY |
| CRK | CREEK |
| CRL | CROCODILE LAKE NATIONAL WILDLIFE REFUGE |
| CTB | CAT TRACK BEACH |
| CUL | CUTHBERT LAKE |
| DAL | DALRYMPLE'S |
| DCO | DAVIS COVE |
| DCR | DAVIS CREEK |
| DES | DEAD STORK |
| DRB | DEERING BAY |
| DRK | DEER KEY |
| E | EAST |
| EAK | EAGLE KEY |
| ECA | EAST CAPE |
| ECC | EAST CAPE CANAL |
| ECD | EAST CREEK POND |
| ECP | EAST CAPE PLUG |

| | |
|---|---|
| **ECR** | **EAST CREEK** |
| **FLB** | **FLAMINGO BOAT BASIN** |
| **FLM** | **FLAMINGO** |
| **FLP** | **FOX LAKE POND** |

**25. Subject of data set:** From the list below choose the main subject of the data set.

**Assessment/ Decision Support**

**26. Keyword terms** (70): From the list below, note the most appropriate categories from the list below for search features in the metadata catalog.

| | |
|---|---|
| Air Quality | Hydrology (ground) |
| Archeology | Hydrology (surface) |
| **Assessment/ Decision Support** | **Hydrology modeling** |
| Basic Research | Ichthyology |
| Botany | Integrated Pest management |
| Climatology | Invertebrates |
| Coastal/Marine systems | Lake ecology |
| Contaminants/ Haz. Mat. | Limnology |
| **Ecology** | Mammalogy |
| Ecology modeling | Marl Prairie |
| Entomology | Management/Administration |
| **Environmental monitoring** | Microbiology |
| Environmental impact | Minerals Management |
| Erosion/Sedimentation | Oceanography |
| Estuary | Ornithology |
| Exotic species- animals | Paleontology |
| Exotic species- Plants | Petrology/mineralogy |
| Fire | Recreation/Aesthetics |
| Fisheries Management | Restoration- Cultural |
| Flood Management/History | Restoration- Natural |
| Forestry/ tree islands | Ridge and Slough |
| Fungi | Sedimentology/ Stratigraphy |
| Geo-Hazard (chemical) | Sociology |
| Geo-Hazard (physical) | Soil science |
| Geographic Information System | Tectonics |
| Geochemistry | Threatened/Endangered animals |
| Geohydrology | Threatened/Endangered plants |
| Geology- coastal | Water quality |
| Geology- fluvial | Water quantity |
| Geology- general | Water rights |
| Geology- structural | Watershed management |
| Geomorphology | **Wetlands** |
| Geophysics | Wildlife management |
| **Herpetology** | Zoology |
| History | |

**27. Place Keywords:** List regional (general) and local references (specific) for location of your project.

**South Florida**
**Turkey Point**
**Crocodile Lake National Wildlife Refuge**

**Homestead**
**Everglades National Park**
**Crocodile Lakes Wildlife Refuge**

**28. Species:** What species or communities will be examined?

**American crocodile (*Crocodylus acutus*)**

Taxonomy: List species names using ITIS as the taxonomic authority
http://www.itis.usda.gov/ insert information here.

ITIS Report

Go to Screen Version

***Crocodylus acutus* Cuvier, 1807**
Taxonomic Serial No.: 174361

## Taxonomy and Nomenclature

| | |
|---|---|
| **Kingdom:** | **Animalia** |
| **Taxonomic Rank:** | **Species** |
| **Synonym(s):** | **Crocodilus floridanus Hornaday, 1875** |
| **Common Name(s):** | **American crocodile [English]** |
| | **American Crocodile [English]** |
| | **caiman de la costa [Spanish]** |
| | **Central American alligator [English]** |
| | **cocodrilo [Spanish]** |
| | **Cocodrilo americano [Spanish]** |
| | **lagarto [Spanish]** |
| Taxonomic Status: | |
| **Current Standing:** | **valid** |
| Data Quality Indicators: | |
| **Record Credibility Rating:** | **verified - standards met** |

## Taxonomic Hierarchy

| | |
|---|---|
| **Kingdom** | **Animalia -- Animal, animals, animaux** |
| **Phylum** | **Chordata -- chordates, cordado, cordés** |
| **Subphylum** | **Vertebrata -- vertebrado, vertebrates, vertébrés** |
| **Class** | **Reptilia Laurenti, 1768 -- "répteis", "reptiles", "Reptiles"** |
| **Order** | **Crocodilia -- alligators, caimans, crocodiles, Crocodilians, crocodilians, crocodilo, gavials, jacaré** |
| **Family** | **Crocodylidae -- Crocodiles, crocodiles** |
| **Genus** | **Crocodylus Laurenti, 1768 -- crocodiles, Crocodiles** |
| **Species** | **Crocodylus acutus Cuvier, 1807 -- American crocodile, American Crocodile, caiman de la costa, Central American alligator, cocodrilo, Cocodrilo americano, lagarto** |

## References

| | |
|---|---|
| Expert(s): | |
| **Expert:** | **Roy W. McDiarmid** |
| **Notes:** | **U.S. Geological Survey, Biological Resources Division, Patuxent Wildlife Research Center** |
| **Reference for:** | ***Crocodylus acutus*** |
| Other Source(s): | |
| **Source:** | **Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, database (version undefined)** |
| **Acquired:** | **2000** |
| **Notes:** | **CONABIO: (http://www.conabio.gob.mx/)** |
| **Reference for:** | ***Crocodylus acutus*** |
| **Source:** | **Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, database (version undefined)** |
| **Acquired:** | **2001** |
| **Notes:** | **CONABIO: (http://www.conabio.gob.mx/)** |
| **Reference for:** | **Cocodrilo americano [Spanish]** |
| **Source:** | **NODC Taxonomic Code, database (version 8.0)** |
| **Acquired:** | **1996** |
| **Notes:** | |
| **Reference for:** | ***Crocodylus acutus*** |

Publication(s):

| | |
|---|---|
| **Author(s)/Editor(s):** | **Banks, R. C., R. W. McDiarmid, A. L. Gardner, and W. C. Starnes** |
| **Publication Date:** | **2004** |
| **Article/Chapter Title:** | |
| **Journal/Book Name, Vol. No.:** | **Checklist of Vertebrates of the United States, the U.S. Territories, and Canada, draft (2004)** |
| **Page(s):** | |
| **Publisher:** | |
| **Publication Place:** | |
| **ISBN/ISSN:** | |
| **Notes:** | **As-yet (2004) unpublished manuscript from 1998** |
| **Reference for:** | ***Crocodylus acutus*, American Crocodile** |

| | |
|---|---|
| **Author(s)/Editor(s):** | **Banks, R. C., R. W. McDiarmid, and A. L. Gardner** |
| **Publication Date:** | **1987** |
| **Article/Chapter Title:** | **Checklist of Vertebrates of the United States, the U.S. Territories, and Canada** |
| **Journal/Book Name, Vol. No.:** | **Resource Publication, no. 166** |
| **Page(s):** | **79** |
| **Publisher:** | **United States Department of the Interior Fish and Wildlife Service** |
| **Publication Place:** | **Washington, D.C., USA** |
| **ISBN/ISSN:** | |
| **Notes:** | |
| **Reference for:** | ***Crocodylus acutus*** |

| | |
|---|---|
| **Author(s)/Editor(s):** | **Flores-Villela, Oscar / McCoy, C. J., ed.** |
| **Publication Date:** | **1993** |
| **Article/Chapter Title:** | **Herpetofauna Mexicana: Lista anotada de las especies de anfibios y reptiles de México, cambios taxonómicos recientes, y nuevas especies** |
| **Journal/Book Name, Vol. No.:** | **Carnegie Museum of Natural History Special Publication, no. 17** |
| **Page(s):** | **iv + 73** |
| **Publisher:** | **Carnegie Museum of Natural History** |
| **Publication Place:** | **Pittsburgh, Pennsylvania, USA** |
| **ISBN/ISSN:** | **0-911239-42-1** |
| **Notes:** | |
| **Reference for:** | ***Crocodylus acutus*** |

| | |
|---|---|
| **Author(s)/Editor(s):** | **King, F. W., and R. L. Burke, eds.** |
| **Publication Date:** | **1989** |
| **Article/Chapter Title:** | |
| **Journal/Book Name, Vol. No.:** | **Crocodilian, Tuatara, and Turtle Species of the World: A Taxonomic and Geographic Reference** |
| **Page(s):** | |
| **Publisher:** | **Association of Systematics Collections** |
| **Publication Place:** | **Washington, D.C., USA** |
| **ISBN/ISSN:** | **0-942924-15-0** |
| **Notes:** | |
| **Reference for:** | ***Crocodylus acutus*** |

## Geographic Information

| | |
|---|---|
| Geographic Division: | **Caribbean**<br>**Middle America**<br>**North America**<br>**South America** |
| Jurisdiction/Origin: | **Continental US, Native**<br>**Mexico, Native** |

## Comments

| | |
|---|---|
| Comment: | **Banks et al. (2003) note: Endangered throughout range** |

**Date Generated:**
**Thu Sep 8 2005 08:32:33 MDT**

**29. Where vouchers collected:** Y **N**

**30. Access Constraints for Sensitive data:** archeological paleological **T&E species** sensitive to collection legally restricted

**31. Cross Reference Citation Information:** For more information about the dataset title from Dataset Citation. Related documentation.

**ABI. 1987. Heavy metal, organochlorine, and PCB burdens in American crocodile eggs and tissues. Draft report. Applied Biology Inc. Atlanta, GA.**

**Brandt, L. A., F.J. Mazzotti, J. R. Wilcox, P. D. Barker, G. L. Hasty, and J. Wasilewski. 1995. Status of the American crocodile (*Crocodylus acutus*) at a power plant site in Florida, USA. Herpetological Natural History, 3(1), 29-36.**

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**Kushlan, J. A., and F.J. Mazzotti. 1989a. Historic and present distribution of the American crocodile in Florida. J. Herp. 23. (1)1-7 Kushlan, J.A., and F.J. Mazzotti. 1989b. Population biology of the American crocodile. J. Herp. 23:7 - 21.**

**Mazzotti, F. 1983. The Ecology of *Crocodylus acutus* in Florida. Ph.D. Dissertation. The Pennsylvania State University, University Park, Pennsylvania. 161 pp.**

**Mazzotti, F. J. 1989. Factors affecting the nesting success of the American crocodile, *Crocodylus acutus*, in Florida Bay. Bulletin of Marine Science 44(1):220-228.**

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**Mazzotti, F.J., and L.A. Brandt. 1995. A biological assessment of the effects of the C-111 project on the American crocodile in northeastern Florida Bay, Everglades National Park. Final Report. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL.**

**Mazzotti, F.J., and M.S. Cherkiss. 1998. Status and Distribution of the American Crocodile (*Crocodylus acutus*) in Biscayne Bay. Final Project Report to South Florida Water Management District Contract Number C-7794.**

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**Stoneburner, D.L., and J.A. Kushlan. 1984. Heavy metal burdens in American crocodile eggs from Florida Bay. J. Herp. 18:192-193.**

**32. Analytical Tool:** Will you use a model or other analytical tool to develop your data set?

**Some of the data collected uses these models:**
**C-111 Basin alternative water delivery models for Taylor Slough/C-111 Basin.**

**Mazzotti, F.J., and L.A. Brandt. 1995. A biological assessment of the effects of the C-111 Final Report. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL.**

**Across Trophic Level System Simulation by US Geological Survey**
**Richards, P. M., and D. L. DeAngelis, 2000. Population modeling of the American crocodile (*Crocodylus acutus*) for conservation and management in Florida. Greater Everglades Ecosystem Restoration Science Conference. Abstracts. p 146.**

**33. Data Verification/Validation** (80): What measures will you take to make certain that your data set is as nearly correct as possible?

**Each agency was responsible for reviewing, proofing and editing data.**

**34. Quality:** **+Ver**

Comments about data quality:

**Each agency was responsible for reviewing, proofing and editing data.**

Advice: Do you have any advice for potential users of the data set?

**This project was a Data mining effort review of original studies would be valuable when analyzing data.**

**Related data sets include:**

**Paul Moler, Florida Fish and Wildlife Conservation Commission, Crocodile capture data**
**Paul Moler, Florida Fish and Wildlife Conservation Commission, Crocodile nesting data**
**Joseph Wasilewski, Florida Power and Light Turkey Point, Crocodile capture data**
**Joseph Wasilewski, Florida Power and Light Turkey Point, Crocodile nesting data**
**Frank J. Mazzotti, Ph D.and Michael S. Cherkiss, University of Florida, Crocodile capture data**
**Frank J. Mazzotti, Ph D. and Michael S. Cherkiss, University of Florida, Crocodile nesting data**
**Frank J. Mazzotti, Ph D.and Michael S. Cherkiss, University of Florida, Crocodile helicopter survey data**
**Frank J. Mazzotti, Ph D.and Michael S. Cherkiss, University of Florida, Crocodile egg data**
**Hydrological data obtained from Everglades National Park, South Florida Water Management District and Southeastern Research Center, Florida International University**
**Dispersal of crocodiles, Data from Mazzotti (personal observation), Wasilweski (unpublished) and Moler (unpublished).**

**Distribution Information:** FGDC Section 6

**35. Data Distribution Contact:** Individual or organization that distributes data.

**Contact Name (s)**
**Contact Institution**
**Institution Address**
**Contact Phone**
**Contact Address**
**Contact E-mail**

**36. Data Format** (80): Paper Access Oracle SQL Server **Excel**

**A CD was submitted with data, appendices, and document**

**37. Transfer size:** 4.450 mb

**Metadata Reference:** FGDC Section 7

**38. Metadata Date:** The date that the metadata is written or completed. Use a date format of year, month, day.

**2007-07-10**

**39. Metadata Contact:** (Your Name):

**This metadata was compiled for the SFNRC by:**

**SFNRC Representative Name**