Responsible Person(s): Antoinette Gorgone, Southeast Fisheries Science Center, Beaufort Laboratory, Beaufort, NC

Funding Agency: National Marine Fisheries Service

Bounding box:

west (xmin) south (ymin) east (xmax) north (ymax)

-86.59410 30.38555 -86.13128 30.50184

Data types:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parameter or Variable | Units | Observation  Category | Sampling  Instrument | Sampling and Analyzing Method | Data Quality Method |
| Marine Mammal | N/A | in situ | camera | https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.94 | N/A |
| Cetacean | N/A | in situ | camera | Photo-identification, mark-recapture | N/A |
| Species abundance | N/A | Model output | camera | Photo-identification mark-recapture | Minimum 2-person check for dorsal fin photo analysis matching and verification |
| Species distribution | N/A | in situ | Global position system device | Visual survey | N/A |

Purpose: These data were collected in order to estimate the population of the common bottlenose dolphins in Choctawhatchee Bay, Florida.

Dataset Title: Common bottlenose dolphin (Tursiops truncatus) photographic identification catalog collected for mark-recapture abundance estimation and biological sampling from small boats in Choctawhatchee Bay, Florida, Gulf of Mexico, from 2007-07-24 to 2007-08-30 (NCEI Accession 0237742)

Abstract: The NOAA National Marine Fisheries Service Southeast Fisheries Science Center conducted a common bottlenose dolphin (Tursiops truncatus) photo-identification mark-recapture and biological sampling project in Choctawhatchee Bay, Florida from 24 July to 30 August in 2007.  A model-averaged estimate of the superpopulation of bottlenose dolphins in and around Choctawhatchee Bay was 232 (SE = 13) animals. Estimated resident abundance was 179 (SE = 8), which was lower than the number of unique animals encountered (n=188).  This data collection includes dorsal fin photographs and sighting histories for unique photo-identified individual dolphins, including information about spatial distribution, mark characteristics, biological samples obtained, and GIS data such as survey track and waypoint files.

Additional information about this dataset:

Peer-reviewed publication describing the study for this dataset: Conn PB, Gorgone AM, Jugovich AR, Byrd BL, Hansen LJ. Accounting for transients when estimating abundance of bottlenose dolphins in Choctawhatchee Bay, Florida. The Journal of Wildlife Management. 2011 Apr;75(3):569-79. https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.94

There are 3 data types included in this dataset: data records, GIS files, and a catalog of images:

* Data records
  + Individuals - rows are records of unique photo-identified individual common bottlenose dolphins observed on date of survey. The ID# and date of each record correspond to the photograph file name in the catalog
    - ID#: identification number of a unique individual dolphin, “CB” indicates the individual dolphin was observed in Choctawhatchee Bay
    - Survey Date: date of observation
    - Enc#: encounter number, encounter count is reset to “1” at the beginning of each survey/day
    - Vessel: survey vessel platform (e.g., a small boat name)
    - Lat: latitude of observation
    - Long: longitude of observation
    - Distinctiveness: a subjective measure of dorsal fin distinctiveness or “recognizability”, with 1=not distinctive, 2=slightly distinctive, 3=average distinctiveness, 4=very distinctive
    - Non-trailing edge characteristics (NTEC) - indicates a distinctive mark on the dorsal fin or peduncle of the animal with an otherwise clean trailing edge of the dorsal fin
      * LEN=Leading Edge Notch
      * PN=Peduncle Notch
      * TN=Top Notch
      * Dent=indent rather than notch
    - Photo quality: a subjective measure of photographic quality:
      * 1=poor, 2=fair, 3=good, 4=great, 5=excellent
      * Factors influencing photo quality include:
        + degree of focus, angle, contrast, distance, and whole or partial dorsal fin exposure (e.g., if a dorsal fin is partially submerged by water)
    - Biopsy - Sample identification number of an individual if a remote biopsy sample was collected during the encounter
    - Sex - biological sex identified from photographs for some individuals (e.g., a photograph of the genitalia)
    - Effort - Survey effort designated as “on” or “off,” depending on the watch status of the survey crew. Surveys designated as “on” followed standard visual survey protocol, as described in Conn et al. 2011.
* GIS files
  + GPS track and waypoint files provided in both .gdb and .txt formats
  + File naming convention: DDMonthYY, where the 2 digit day, abbreviated month, and 4 digit year, followed by an underscore and designated as “tracks” or “wpts”; for example: 01Aug2007\_tracks.gdb or 01Aug2007\_wpts.txt
* Catalog
  + Dorsal fin photographs for unique individual common bottlenose dolphins in .jpg format
  + Photograph file names include the individual ID#, date of observation, and image number.
  + File name convention: ID###\_DDMonthYYYY\_####.JPG; for example: CB001\_03Aug2007\_0202.JPG
  + Exchange file image format (EXIF) metadata was embedded in each image by the digital cameras used to take the photograph (Canon 10D or 20D) and indicates technical qualities of the photograph and camera model