

Cathy A. Beck
Wildlife Biologist

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EDUCATION

1985 M.S. University of Florida, Wildlife Biology
Thesis title: Helminth parasites of the West Indian manatee, *Trichechus manatus*, L., in Florida
1978 B.A. California State University, Long Beach, Biology
1975 A.A. El Camino College, California

AREAS OF SPECIALIZATION / PROFESSIONAL INTERESTS

Current interests include photo-identification studies of mammals, parasites of manatees, manatee food habits and diet determination, the assessment of marine and aquatic habitats, and extralimital distribution of manatees.

PROFESSIONAL EXPERIENCE

1989 – Present Wildlife Biologist U.S. Geological Survey, National Biological Survey, U.S. Fish and Wildlife Service

I serve as manager of the Manatee Individual Photo-identification System (MIPS), a computerized archive of sighting and life history data on individual manatees from throughout the southeastern United States. I supervise the daily operation, maintenance, data acquisition and input, and report writing of MIPS generated data, and coordinate the development of a network-based MIPS to enable designated federal, state, and private partners to access aspects of the database. I consult frequently with federal, state, and foreign researchers and managers on manatee research methodology. With collaborators, MIPS data are presently utilized for various analyses on estimation of survival, reproduction, movement, and population growth rates, scar acquisition rates, and tests of hypotheses on factors affecting survival and reproductive rates of manatees.

1978 – 1988 Biological Technician U. S. Fish and Wildlife Service
Previous work experience: teaching assistant in Parasitology (1982 - University of Florida, College of Veterinary Medicine) and Marine Biology (1976 – 1978, Glendale College); museum curatorial assistant in mammalogy (1977 – 1978, Los Angeles County Museum of Natural History).

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS (CURRENT)

Journey North, an educational Math and Science Project of The Annenberg Foundation:
(<http://www.learner.org/jnorth/>). Scientific Consultant on manatees, 1997 – Present
Society of Marine Mammalogy: Charter member, 1983 – Present; Biennial Conference Committee, 1995;
Serve as one of four reviewers for the Emily B. Shane Award, for research grants on Odontocetes and Sirenians, 1997 – Present (\$10,000 annually to eligible students or researchers)

HONORS AND AWARDS

Quality Performance/Special Achievement Awards: 1980, 1983, 1992, 1993, 1994, 1995.
Merit Increase Awards: 1981, 1983, 1990, 1993, 1997.

GRANTS FOR CURRENT RESEARCH

Science Support Program, USFWS/USGS, 2004, \$150,000.
Science Support Program, USFWS/USGS, 2003, \$150,000.
U.S. Fish and Wildlife Service, 2003, \$90,850.
Georgia Department of Natural Resources, 1999, \$4,000.
National Biological Information Infrastructure, 1998, \$65,000.
Florida Department of Environmental Protection, 1997, \$27,280.

Research Partnership Program, 1997, \$4,609.

SELECTED PUBLICATIONS

- Langtimm, C. A., and **C. A. Beck**. 2003. Lower survival probabilities for adult Florida manatees in years with intense coastal storms. *Ecological Applications*, 13:257-268.
- O'Shea, T.J., L.W. Lefebvre, and **C.A. Beck**. 2001. Florida Manatees: Perspectives on Populations, Pain, and Protection. Pp. 31-43 *in* Handbook of Marine Mammal Medicine, 2nd ed. L.A. Dierauf and F.M.D. Gulland, eds. CRC Press, Boca Raton, FL.
- Eros, C., H. Marsh, R. Bonde, T. O'Shea, **C. Beck**, C. Recchia, and K. Dobbs. 2000. Procedures for the Salvage and Necropsy of the Dugong (*Dugong dugon*). Research Publication No. 64, Great Barrier Reef Marine Park Authority. 74 pp.
- Marsh, H., **C.A. Beck**, and T. Vargo. 1999. Comparison of the capabilities of dugongs and West Indian manatees to masticate seagrasses. *Marine Mammal Science* 15(1):250-255.
- Mignucci-Giannoni, A.A., **C.A. Beck**, R.A. Montoya-Ospina, and E.H. Williams, Jr. 1999. Parasites and commensals of the West Indian manatee from Puerto Rico. *Journal of the Helminthological Society of Washington* 66(1):67-69.
- Langtimm, C.A., T.J. O'Shea, R. Pradel, and **C.A. Beck**. 1998. Estimates of annual survival probabilities for adult Florida manatees (*Trichechus manatus latirostris*). *Ecology* 79(3):981-997.
- Mignucci-Giannoni, A.A., and **C.A. Beck**. 1998. The diet of the manatee (*Trichechus manatus*) in Puerto Rico. *Marine Mammal Science* 14(2):394-397.
- Beck, C.A.** and J.P. Reid. 1995. An automated photo-identification catalog for studies of the life history of the Florida manatee. Pp. 120-134 *in* T.J. O'Shea, B.B. Ackerman, and H.F. Percival, eds., Population Biology of the Florida Manatee (*Trichechus manatus latirostris*). National Biological Service, Information and Technology Report 1. 289 pp.
- Wright, S.D., B.B. Ackerman, R.K. Bonde, **C.A. Beck**, and D.J. Banowetz. 1995. Analysis of watercraft-related mortality of manatees in Florida, 1979-1991. Pp. 259-268, *in* T.J. O'Shea, B.B. Ackerman, and H.F. Percival, eds., Population Biology of the Florida Manatee (*Trichechus manatus latirostris*). National Biological Service, Information and Technology Report 1. 289 pp.
- Beck, C.A.** 1994. Book review of Marine Mammals Ashore: A Field Guide for Strandings, J.R. Geraci and V.J. Lounsbury. 1993. Texas A&M Sea Grant Publication TAMU-SG-93-601. *Journal of Wildlife Diseases* 30(4):620-621.
- Salisbury, C.L. and **C.A. Beck**. 1993. Regional West Indian manatee 1992 Studbook. Lowry Park Zoological Garden, Tampa, FL. 38 pp.
- Beck, C.A.** and N.B. Barros. 1991. The impact of debris on the Florida manatee. *Marine Pollution Bulletin* 22(10):508-510.
- Bonde, R.K. and **C.A. Beck**. 1990. How the Florida manatees fare today. *Whalewatcher* 24(1):8-9.
- Buergelt, C.D., R.K. Bonde, **C.A. Beck**, and T.J. O'Shea. 1990. Myxomatous transformation of heart valves in Florida manatees (*Trichechus manatus latirostris*). *Journal of Zoo and Wildlife Medicine* 21(2):220-227.
- Beck, C.** and D.J. Forrester. 1988. Helminths of the Florida manatee, *Trichechus manatus latirostris*, with a discussion and summary of the parasites of sirenians. *Journal of Parasitology* 74(4):628-637.
- Hurst, L.A. and **C.A. Beck**. 1988. Microhistological characteristics of selected aquatic plants of Florida with techniques for the study of manatee food habits. USFWS Biological Report 88(18). 145 pp.
- O'Shea T.J., **C.A. Beck**, R.K. Bonde, H.I. Kochman, and D.K. Odell. 1985. An analysis of manatee mortality patterns in Florida, 1976-81. *Journal of Wildlife Management* 49(1):1-11.
- Buergelt, C.D., R.K. Bonde, **C.A. Beck**, and T.J. O'Shea. 1984. Pathologic findings in manatees in Florida. *Journal of the American Veterinary Medical Association* 185(11):1331-1334.
- Bonde, R.K., T.J. O'Shea, and **C.A. Beck**. 1983. A manual of procedures for the salvage and necropsy of carcasses of the West Indian manatee (*Trichechus manatus*). National Technical Information Service, #PB83-255273, Springfield, VA. 175 pp.
- Beck, C.A.**, R.K. Bonde, and G.B. Rathbun. 1982. Analyses of propeller wounds on manatees in Florida. *Journal of Wildlife Management* 46(2):531-535.
- Beck, C.A.**, R.K. Bonde, and D.K. Odell. 1981. Manatee mortality in Florida during 1978. Pp. 76-85 *in* The West Indian manatee in Florida (R. L. Brownell, Jr., and K. Ralls, eds.). Proceedings of a workshop held in Orlando, Florida, 27-29 March 1978. Florida Department of Natural Resources, Tallahassee, FL. 157 pp.