

Carrie L. Newell

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EDUCATION:

M.S.: Biological Oceanography. Feeding Ecology of Summer Resident Gray Whales on Mysid Shrimp Swarms. Minor in Science Education. Oregon State University, Corvallis Oregon. May 2007.

M.S.: 1991. Biological Science-Aquatic Zoologist. Minor in Geology. Northern Arizona University, Flagstaff, Arizona. September 1987-December 1991.

B.S.: 1984. Biological Composite with an emphasis in Botany and Zoology. Secondary Education Teaching Certification. Minors in Geology and Physical Education. Southern Utah University, Cedar City, Utah. September 1981 - July 1982.

B.S.: 1983. Wildlife and Fisheries Science. Minor in Chemistry. South Dakota State University, Brookings, South Dakota. September 1981-July 1982.

Lake Superior State University, Sault Ste. Marie, Michigan. Major: Biological Science. September 1979 — June 1981.

TEACHING EXPERIENCE:

College Professor: Taught General Biology, Ocean Life Foundations, Marine Biology, Seabirds and Marine Mammals, Seashore Ecology, Birds of Oregon, Nature of the Northwest, Animals: Past and Present, and Endangered Animals & Their Environment. Participant on numerous committees and recipient of various curriculum development grants. Developed, oversee and supervise wet lab facilities. Preparation of Web pages and textbooks. Eugene, Oregon. September 1992 — January 2019.

College Professor: Taught a field-based Marine Biology class through Oregon State University at the Hatfield Marine Science Center. Newport, Oregon. 2007 — 2009.

“Whale Watching Spoken Here” Instructor. Taught volunteers from all over the country about general characteristics of Gray Whales, other cetaceans, pinnipeds and specifically Oregon's summer resident gray whales so they could disseminate this knowledge to the 1,000's of visitors that visit the Oregon and Washington coasts during whale watch weeks. Oregon State Parks. January 2005-present.

Science Factory Instructor: Taught numerous classes about Geology, Botany and Zoology. Eugene, Oregon. Summer 2000, 2001, 2002.

Elderhostel Instructor: Taught about Marine Mammals. Topics included identification, adaptations, and life histories. Field trips to local rookeries and lookout points were conducted. Elderhostel Program, Lane Community College, Florence, Oregon. October 1994 — 1997.

Seataqua Instructor: Taught field classes on Seabirds, Marine Mammals and Estuary Exploration. These classes involved numerous field experiences relating to the marine environment. Hatfield Marine Science Center, Newport, Oregon, May 1994 — 1996.

College Instructor: Taught Biological Concepts, Principles of Biology, Animal Biology, Microbiology, Birds of the Region 1 & 2, Concepts in Racquetball, Weight Trainings 1-4 and Rhythmic Exercise. Supervised Lab Assistants. Yavapai College, Adjunct, Clarkdale, Arizona. September 1985 — July 1992.

Naturalist/Purser: Worked on the Western Prince as an expert on orcas, porpoises, minke whales, pinnipeds and seabirds. Performed purser duties. Bob and Jean VanLeuven: Western Prince Cruises, San Juan Island, WA. June 1995.

Federal Observer: Took classes involving the identification of marine fish, seabirds and marine mammals of the Pacific Northwest and Alaska. Learned about fishing techniques and strategies. Applied this information to my boat tour in Alaska where I performed various duties from a trawler targeted for flatfish. Duties included sampling for species composition, identification, weight and length measurements of fish and sightings of seabirds and marine mammals. This data was compiled on various forms and sent to the National Marine Fisheries Service. This work was done through NOAA; specifically the NMFS division in Seattle WA, contractor, Northwest Observers, Inc. June - August 1994.

Whale Watch Volunteer: Took classes involving the identification, relative literature and up to date research on various whales, seals and sea lions. Relayed this information to the public at various locations along the Oregon Coast during peak Gray Whale migration times. Hatfield Marine Science Center. March 1993 — 1994.

Environmental Consultant: Performed a life history study on the amphipod, *Gammarus lacustris* to help in determining possible affects of the Glen Canyon Dam and fishing pressure. Analyzed 450,000 amphipod specimens to determine size, sex, egg numbers and diseases. This \$9400 contract was done through the Arizona Game and Fish Department. June 1993 — January 1994.

M.S. Thesis: Biology and Population Dynamics of the amphipod, *Crangonyx gracilis* in Bubbling Springs, Arizona. Conducted research in a spring-fed thermally constant system on the habitat, seasonal density, diel pattern, food and predation on the amphipod *Crangonyx gracilis*. Also determined this was a new distribution record for this amphipod. Dr. Dean Blinn, Advisor, Biology Department, Northern Arizona University. May 1988 - December 1991.

Research Grant: Provided a status survey on an amphipod, two caddis flies, and a snail found in the Page/Bubbling/Lolomai Springs/Oak Creek Complex. Identification, distribution, life history, ecology, and endemism was performed and written into a technical paper. Page Springs, Arizona, U.S. Fish and Wildlife Service. May 1988 — October 1991.

Research Assistant: Description and paleoecological niche of fossils in the Verde Formation. Made photographic plates of the fossils and compiled all information into a technical paper.

Dr. Dale Nations, Supervisor, Geology Department, Northern Arizona University. February 1988 — 1991.

Consultant: Dissected and analyzed larval flannel mouth and mountain sucker stomachs. Identification of amphipods and aquatic insects was performed. Results were compiled into a technical paper. Arizona Game and Fish Department. January 1986.

Consultant: Dissected and analyzed larval rainbow trout stomachs. Identification of aquatic insects, zooplankton, amphipods, and other freshwater invertebrates was performed. Results were compiled into a technical paper. Arizona Game and Fish Department. May 1985.

Elderhostel Instructor: Taught about Birds of Arizona, Life Zones, and Natural History of Arizona. Emphasized the native plants and animals and the importance of riparian areas. Field trips conducted to learn about the geology of the Verde Valley and Oak Creek Canyon. Elderhostel Program, Yavapai College, Prescott, Arizona. May 1987 — July 1992.

Environmental Education Teacher: Taught about the environment and geology at the elementary and junior high schools of the Verde Valley. Randy Miller, supervisor, Environmental Education Center, Cottonwood, Arizona. Fall 1990 — Spring 1992.

Secondary Teacher: Taught Biology, Chemistry, and 7-12 Girls Athletics. Also was head varsity basketball and volleyball coach. Panguitch High, Panguitch, Utah. August 1984 — May 1985.

Lab Assistant: Assisted in the preparation and teaching of Zoology and Physiology labs at Southern Utah University, Cedar City, Utah. September 1982 — December 1983.

RELATED EXPERIENCES:

Whale Research EcoExcursions: Operate a whale watching/ecotourism business. Educate tourists all over the world about Oregon's summer resident gray whales and other marine life. Do daily trips. Own and operate 22-foot, 25-foot, 26-foot and 36-foot Zodiacs. Oregonwhales.com Depoe Bay, Oregon. May 2005-Present.

Whale, Sealife and Shark Museum: Own and operate a museum that focuses on the summer resident gray whales, other cetaceans, pinnipeds, birds, sharks, and invertebrates. May 2013-present.

Whale Guide to San Ignacio Lagoon, Baja California, Mexico. Lead trips to San Ignacio Lagoon to teach people about gray whales and other wildlife. Baja Ecotours 2013-present.

Worked as a naturalist on various whale watching boats in Newport and Depoe Bay, Oregon from 1992-2005.

Wecoma Volunteer: Worked on the Oregon State University research ship Wecoma on phytoplankton research. Performed various biological, chemical and physical oceanographic techniques, identification of various invertebrates and vertebrates, including krill, deep-sea fish, seabirds, dolphins, porpoises, and whales. Roger Hewitt: Southwest Fisheries, Science Center, San Diego, California. July 1998.

Orca Research: Worked at the Center for Whale Research with an Earth Watch team on San Juan Island, Washington researching the southern resident community of orcas. Duties included taking photos, developing photos, identifying individual orcas from the photos, behavior analysis, data entry, presenting lectures and supervising earth watchers. Ken Balcomb: Center for Whale Research, San Juan Island, WA. June/July 1996 — 1998.

Blue Whale Research: Worked around the Channel Islands with blue whale acoustics and surface behavior characteristics. Scripps Institute of Oceanography, San Diego CA. July 1996.

Gray Whale Trip: Attended a trip with Bruce Mate to San Ignacio Lagoon to view this gray whale breeding/calving lagoon, observed and interacted with friendly gray whales, and learned about pinnipeds and seabirds. Local geology, flora and fauna were identified and discussed. Oregon State University Foundation, Corvallis OR. March 1996,

Dolphin Class: Attended a class at the Dolphin Research Center in the Florida Keys to learn about dolphin behavior. Swimming and training sessions were also done with dolphins. Dolphin Research Center, Marathon Key FL. July 1995.

Environmental Consultant: A feasibility study to determine the environmental impacts of a proposed dam. Survey species composition of the area and determine the effects on some threatened and endangered species. Compiled this information into a paper. Palmer/Wilding Engineering Co. September — October 1984.

Fisheries Technician: Researched and analyzed literature related to the alimentary canal development of walleye, yellow perch and large-mouth bass. Prepared a series of illustrations depicting this development. Assisted in feeding fish, zooplankton collection, water chemistry, and cleaning tanks. Southern Dakota Cooperative Fisheries Research Unit. June 1981 — August 1982.

Fisheries Aide: Helped in the development of a method of rearing lake whitefish intensively. I was involved in the development and experimentation with various disease treatments and fish diets. Lake Superior State University, Sault Ste. Marie, Michigan. May — September 1980.

PUBLICATIONS AND PRESENTATIONS:

Publications:

“Unusual Gray Whale Eschrichtius robustus Feeding in the Summer of 2005 off the Central Oregon Coast” by Carrie Newell and Tim Cowles. Geophysical Research Letters, Vol. 3.3, L 22511, doi:10.1029/2006 GLO27189,2006.

“A Guide to Resident Gray Whales Along the Oregon Coast” by Carrie Newell 73pp. Nature Unlimited Ink Publishing, April 2005.

“A Guide to Whales, Dolphins and Porpoises Along the Northwest Coast” by Carrie Newell 64pp. Nature Unlimited Ink Publishing 2011.

“A Guide to Seals, Sea Lions and Sea Otters along the West Coast” by Carrie Newell 60pp. Nature Unlimited Ink Publishing 2012.

“A Guide to Seabirds and Shorebirds along the Pacific Coast” by Carrie Newell 58pp. Nature Unlimited Ink Publishing 2011.

Marine Biology Textbook: “Discovering Marine Biology” by Carrie Newell Kendall Hunt Publishing 2009.

“A Depoe Bay Gray Whale Adventure” by Carrie Newell 45pp. Nature Unlimited Ink Publishing, August 2008.

Research featured in a PBS film by Jean Michel Cousteau’s Ocean Future’s Society called Gray Whale Obstacle Course. Aired summer 2006. Research featured in upcoming Oregon Field Guide PBS film.

PBS Oregon Field Guide Season 22, Episode 3 on Summer Resident Gray Whales along the Oregon Coast

PRESENTATIONS

American Cetacean Society Meeting Nov. 2008. Presented a poster on: The Feeding Ecology of Gray Whales. Won the Student Poster Award.

Ocean Sciences Meeting Feb. 2008. Presented a Poster: The Spatial-Temporal Distribution of Nearshore Mysid Swarms and their Primary Predator, Gray Whales.

Talk to captains and naturalists at Kenai Fjords Tours, Seward AK, about gray whales. May 2007, March 2008.

Talk for Orca Network on Whidbey Island, WA on the specifics of summer resident gray whales.

Talk at the Hatfield Marine Science Center to the Newport & Depoe Bay captains, deck hands, and charter office personnel on resident gray whales and mysids. May 2002, 2003.

Participation at International Whaling Commission (IWC) Meeting in Anchorage, Alaska, May 2007.

SCHOLARSHIPS & AWARDS:

Philip A. Hart Scholarship, Lake Superior State University. This scholarship is presented annually to the two freshmen whose goal of scholarship, leadership, and service best reflect those of the late Senator Hart. This is a four-year scholarship for full tuition, room and board, and books.

Michigan Competitive Scholarship, Lake Superior State University.

F.O. Butler Scholarship, South Dakota State University.

K.F. Christensen Scholarship, Southern Utah University

Utah Geological Association Scholarship, Southern Utah University.

Mamie Markham Research Award, Hatfield Marine Science Center.

Holt Education Award, Hatfield Marine Science Center.

AquaDopp Equipment Award.

HONORS:

B.S. Magna Cum Laude

Phi Kappa Phi

Freshman Honor Society

High School Valedictorian

Favorite Teacher of the Year at Panguitch High School

Nominated by Lane Community College students for Teacher of the Year in 1996, 1997 and 1998. Teacher of the Year in the LCC Science Department in 2005

SPECIAL SKILLS & INTERESTS:

Captain License (50 ton)

Rescue Diver Certification (PADI) and Water Safety Instructor

Basketball, racquetball, weight training, nature photography, camping, hiking, kung fu/ MS Word, Excel, Photoshop, Adobe In-Design

REFERENCES:

Tim Cowles, Professor, Oregon State University, Corvallis, OR 97331. (541) 737-3966.

Paul Ruscher, Department Chair in Science, Lane Community College, Eugene OR 97405. (541) 463-5260.

Pat Boleyn Lane Community College, Eugene OR 97405 (541) 463-5445.