# CURRICULUM VITAE

## Dr. GARRETT E. CROW, PhD

Professor Emeritus – Botany Director Emeritus, Hodgdon Herbarium University of New Hampshire Durham, New Hampshire 03824

E-Mail: garrett.crow@unh.edu cell phone: 616-826-2096

Home Address: 4938 Maltese Ct NE

Belmont, MI 49306

Born: December 11, 1942, Phoenix, Arizona, USA

**Family:** Wife - Charlyn Williams Crow

Children - Lindsay Allison Crow (b. 10 Aug. 1976)

Megan Joy Crow (b. 19 Dec. 1977) Jason Aaron Crow (b. 24 Aug. 1981)

**Education:** High School

New Providence, New Jersey - graduated 1961

**Higher Education** 

B.A. Taylor University, 1965

M.S. Michigan State University, 1968

Ph. D. Michigan State University, 1974

M.S. Thesis: An Ecological, Floristic, and Phytogeographical Analysis of a

Southern Michigan Bog.

Ph.D. Dissertation: A Revision of the North American Species of Sagina

(Caryophyllaceae).

## **Professional Experience:**

University of New Hampshire, 1975-2008 (career)

Professor of Botany; Director UNH Herbarium

Department Chairperson, Dept. of Plant Biology, 2001-2008

Calvin College, 2011-present

Volunteer Curator, Calvin College Herbarium

Spring Arbor University

Visiting Professor, Plant Taxonomy, fall 2011

Michigan State University, 2010-present

Visiting Adjunct Professor, Dept. Plant Biology, MSU Herbarium

Wheaton College Science Station, Black Hills, SD

Professor, Plant Taxonomy, summer 2010

Au Sable Institute of Environmental Studies

Professor of Botany, summers 2005-2010

Organization for Tropical Studies, Costa Rica

Contributing lecturer, OTS Field Station, Palo Verde National Park, June 2008

Charles University, Prague, Czech Republic

Visiting Lecturer, October 2004

Instituto Nacional Biodiversidad (INBio), Costa Rica

Colabrador de botanica, 1999-2000; Sept.-Nov. 2006; Sept.-Oct. 2009

Universidad Nacional, Costa Rica

Fulbright Visiting Professor, 1999-2000

Visiting Professor during sabbatical leave, 1984

Michigan State University

Research Associate, 1974-75

Instructor, 1973-74

Graduate Assistant 1965-72

University of Montana (Biological Station)

Graduate Teaching Assistant, summers 1968, 1969

Au Sable Trails, Mancelona, Michigan

Assistant to the Director, summers 1965, 1966

## **Scholarships and Awards:**

UNH Award for Excellence in International Engagement, 2000-2001

Fulbright Scholar (Costa Rica), 1999-2000

UNH Faculty Scholar Award, 1999-2000

New England Wild Flower Society Education Award, 1992

UNH Faculty Development Award, 1983, 1985, 1989

UNH Board of Trustees Faculty Merit Award, 1983

UNH Distinguished Faculty Award, 1982

UNH Board of Trustees Faculty Merit Award, 1979

U.S. Fish & Wildlife Service Award of Achievement, 1979

Michigan State University Graduate School Office Scholarship, 1972

## **Teaching Experience at UNH:**

Principles of Biology II (BIOL 412)

International Perspectives (IA 401 – International Affairs dual major)

Systematic Botany (PBIO 566)

Aquatic Plants (PBIO 747/847)

Plant Geography (PBIO 761/861)

Advanced Systematic Botany (PBIO 867)

Investigations in Systematic Botany (PBIO 795A/895A)

Recent Advances in Systematic Botany (PBIO 885A/886A)

### **Administrative Activities:**

Chairperson, Dept. of Plant Biology (Jan. 2001-June 2006; Oct. 2007-May 2008)

Hodgdon Herbarium

Director and Curator of Vascular Plants (1975-2008)

## Symposia Organized:

**Endangered Species Symposium** 

"Rare and Endangered Plant Species in New England"

Harvard University, Cambridge, MA -- May 1979

Symposium, Co-organizer

"Plant Conservation: A Biogeographic Perspective" Harvard University, Cambridge, MA -- May 1988

### **Professional Service Activities:**

Associate Editor, botanical journal RHODORA, 1976-1994; 1996-2008

Forensic Botanist/Expert Witness, NH Office of Attorney General

VandeBogart Homicide/Rape Trial, July, 1991

Regional Advisory Council, New England Plant Conservation Program

New Hampshire Task force, New England Plant Conservation Program

NH Scientific Committee on Biodiversity, DRED/Div. Forests & Lands

Forest Health Monitoring Program, USDA Forest Service

New England Botanical Club Committee on Endangered Species, Vice-chair, 1977-83

## **Organization Memberships:**

Michigan Botanical Club/Red Cedar Chapter (Program Chair, 2010-2012)

New England Botanical Club (President, 1988-90; VP, 1986-88; Program Chair, 1983-1988)

American Society of Plant Taxonomists

International Association for Plant Taxonomists

Sigma Xi

#### **Research Interests:**

Biodiversity, systematics, phytogeography, and ecological floristics

Aquatic plants: temperate (Michigan, New Hampshire, North America, Russia)

neotropical (Costa Rica, Bolivia, Amazonia)

### **Current Research Projects:**

Flora North America: Lentibulariaceae (*Utricularia*, *Pinguicula*)

Revising/updating book: Aquatic and Wetland Plants of Northeastern North America

(Crow & Hellquist – University of Wisconsin Press)

Aquatic Plants of Costa Rica – bilingual field guide

Manual of the Plants of Costa Rica (B. Hammel, N. Zamora & M. Grayum,

Instituto Nacional Biodiversidad): Taxonomic treatments of aquatic families—

Cabombaceae, Ceratophyllaceae, Elatinaceae, Podostemaceae

### Publications: >100 professional articles, books, book chapters

see separate listing

## Graduate Theses/Dissertations of G. Crow's UNH Grad Students:

Ross, S. Rachel. 1978. The effects of prescribed burning on ground cover vegetation of white pine and mixed hardwood forests in southeastern New Hampshire. M.S. Thesis.

Carter, Jonathan K. 1979. A floristic and phytogeographical analysis of selected serpentine sites in Maine. M.S. Thesis.

- McDonnell, Mark J. 1979. The vascular flora of Plum Island, Essex County, Massachusetts, with an analysis of the impact of human trampling on the coastal dune vegetation. M.S. Thesis.
- Storks, Irene M. 1979. Rare and endangered vascular plant species in New Hampshire with special reference to the White Mountain National Forest. M.S. Thesis.
- Levesque, Christine M. 1980. Taxonomic implications of seed morphology of *Arenaria* and *Minuartia* (Caryophyllaceae) utilizing scanning electron microscopy. M.S. Thesis.
- Brackley, Frances E. The Orchidaceae of New Hampshire. M.S. Thesis.
- Philbrick, C. Thomas. 1982. Contributions to the reproductive biology of *Podostemum ceratophyllum* Michx. M.S. Thesis.
- Dunlop, Debra A. 1983. The flora and vegetation of a New Hampshire peat bog. M.S. Thesis.
- Shannon, Robynn K. 1985. Phenology and life history of *Petalonia fascia* and *Scytosiphon lomentaria* (Scytosiphonales: Phaeophyta) in New Hampshire. M.S. Thesis. (joint advisor, A. C. Mathieson).
- Dunlop, Debra A. 1990 A biosystematic study of the Scirpinae group of Carex (Cyperaceae). Ph.D. Dissertation.
- Caldwell, Fredricka A. 1990. The floristics and vegetation ecology of a fresh water tidal marsh on the Merrimack River, West Newbury, Massachusetts. M.S. Thesis.
- Weatherbee, Pamela B. 1990 The flora of Berkshire County, Massachusetts. M.S. Thesis.
- Weiss, Sandra J. 1992. The floristics and vegetation ecology of a coastal saltmarsh in New Hampshire. M.S. Thesis.
- Fahey, Linda L. 1993. The flora, vegetation, and phytogeography of two New Hampshire peatlands. M.S. Thesis.
- Padgett, Donald J. 1993 A comparison of created and natural wetlands of southeastern New Hampshire: flora and vegetation. M.S. Thesis.
- Williams, G. E. Mary. 1996. The flora and vegetation of Fortress Louisbourg Parks Canada [Cape Breton, Nova Scotia, Canada]. M.S. Thesis.
- Hellquist, C. Eric. 1996. A flora and analysis of the Bryophyte and Vascular Plant Communities of Little Dollar Lake Peatland, northern Michigan. M.S. Thesis.
- McCauley, Kathleen M. 1996. An analysis of the flora, vegetation and phytogeography of Platt Park, Southbury, Connecticut. M.S. Thesis.
- Padgett, Donald J. 1997. A biosystematic monograph of the genus *Nuphar* (Nymphaeaceae). Ph.D. Dissertation. University of New Hampshire. Durham, NH.
- Teeling, Leslie M. 1998. Floristic Diversity of the Hubbard Brook Experimental Watersheds. M.S. Thesis.
- Ritter, Nur P. 2000. Plant biodiversity and species richness in Bolivian aquatic ecosystems from the Andes to the Amazon basin. Ph.D. Dissertation (student completed degree under Dr. T. D. Lee).
- Teeling Adams, Leslie M. 2003. Floristic Diversity of Some Primary Old Growth Watersheds in New Hampshire, and a Comparison of Their Relative Diversity to the Hubbard Brook Experimental Forest Watersheds. Ph.D. dissertation.
- Jahr, Kassandra. 2003. A comparison of floristic biodiversity in varying-aged created wetlands in southeastern New Hampshire. M.S. Thesis.

Nazaire, M. 2005. A study of the vegetation and floristic diversity of two peatland complexes of post-settlement origin in Lake Umbagog National Wildlife Refuge, Coos County, New Hampshire. M. S. Thesis.

Bradley, Adam. The flora and vegetation of Timber Island, Lake Winnipesaukee, New Hampshire. M.S. Thesis.

## **Undergraduate Research / Undergraduate Senior Honors Theses:**

- Hellquist, C. Eric. 1994. A comparison of the plant biodiversity of Mud Pond Bog, Moultonborough, New Hampshire to four other North American peatlands. Senior thesis. University Honors Program. Department of Plant Biology, University of New Hampshire.
- McCauley, Kathleen M. 1994. The vegetation of the Bermudas. Senior thesis. University Honors Program. Department of Plant Biology, University of New Hampshire.
- Osgood, Katherine. 1995. Predicting potential habitat for the federally endangered orchid Isotria medioloides by use of a Geographic Information System (GIS): field testing the model. Honors-in-Major. Department of Plant Biology, University of New Hampshire.
- Caughlin, Brook M. 1998. Medicinal plants used in San José de la Montaña, Barva, Heredia, Costa Rica. UNH International Research Opportunity Program. Biology Program, University of New Hampshire.
- McAllister, Heath. 1998. Investigation of the plant diversity of the boreal forest (taiga) in the region of St. Petersburg, Russia, and the floristic similarities with New England. Russian Language Program/Plant Biology, University of New Hampshire.
- Caughlin, Brook M. 2000. Medicinal plant usage in San José de la Montaña, Barva, Heredia, Costa Rica. University Honors Program. Biology Program, University of New Hampshire.
- McAllister, Heath. 2000. Plant diversity in the boreal forest of the region of St. Petersburg, Russia. Senior Thesis. University Honors. University of New Hampshire.
- Nazaire, Mare. 2002. Floristic and vegetation studies in the Lake Umbagog wetlands, Coos County, New Hampshire. Plant Biology Conrad Research Award. University of New Hampshire.
- Kras, Lauren A. 2007. A study of the vegetation and floristic diversity of a peatland community in northern Michigan. Undergraduate Research Program. Au Sable Institute of Environmental Studies, Mancelona, Michigan.

#### **Travel:**

#### **North America**

**United States** 

Traveled widely, especially field work in northeast, se. US. and northwest.

Canada

Newfoundland (1972, 1979, 1982, 1985, 1996) Gaspé Peninsula, Quebec, Ontario, Alberta, British Columbia

#### MesoAmerica

Costa Rica

Jan. 1984, planning trip for sabbatical July-December 1984, sabbatical leave,

Visiting Professor, Universidad Nacional, Heredia (taught course on aquatic plants; conducted research on aquatic plants)

August 1987, field work on aquatic plants/UNA October 1989, field work on aquatic plants/UNA August 1990, field work, *Utricularia*, aquatics/INBio March 1996, field work, Podostemaceae, aquatics/INBio

March 1998, field work, Podostemaceae, aquatics/INBio

July 1999-July 2000, Fulbright at Universidad Nacional/

Organization for Tropical Studies, INBio

March 2004, field work Podostemaceae (with Tom Philbrick)/INBio

Sept-Nov 2006 Sabbatical, field work on aquatic plants/INBio

March 2008, aquatic plants/INBio

June 2008, Organization for Tropical Studies, visiting professor (Palo Verde)

Sept-Oct 2009, INBio (Aquatic plants of Costa Rica)

Oct.-Nov. 2012, San Jose, CR (volunteer, Cristo para la ciudad)

#### Mexico

December 1993, states of Hildago, Queretaro, Veracruz

December 1994, states of Guererro, Oaxaca

October 1998, Mexico City (Latin America Botanical Congress)

#### Nicaragua

August 1999, Training consultant on aquatic plants

#### South America

Chile, Strait of Magellan (Patagonia), 1971

Argentina, 1971

Isla de los Estados (Staten Island)

(research assistant to Dr. T. R. Dudley)

Tierra del Fuego, Isla Grande

Bolivia, 1994, 1995, 1996, 1997, 1998

Altiplano, Andean slope, Amazonian Basin, Brazilian Shield,

Gran Pantanal/National Geographic support

Brazil, 2003, Amazon River and Rio Negro (river trip organized by NY Bot. Garden)

2005, Amazon River and Rio Negro (co-leader NYBG trip)

Colombia, Medellin, 2007

Congreso Botanico Colombiano; symposium: Botanica Acuática

#### Europe

Great Britain, 1975 - Study type specimens of *Sagina* at Linnean Society of London, British Museum, Royal Botanic Garden (Kew), field, se. coastal Scotland

USSR, 1975

XII International Botanical Congress, Leningrad

Scientific Field Trip to SSSR Georgia, Abkhazia, Moscow

USSR, 1981

USA-USSR Scientific Exchange Program

Botanical Expedition to Crimea, Moldavia, Western Caucasus

Spain, 1998

Madrid, Toledo, Cáceres, Merida, Sevilla, Jerez, Cadiz area, Ronda highland area, Córdoba, Granada, Sierra Nevada and Mediterranean coast to Valencia, to Segovia.

France, 2002

French Alps, Camarague region, French Pyrenees (Botanical excursion)

Czech Republic 2004

Visiting Professor, Charles University, Prague; field excursions in southern Bohemia and northern mountains.

Greece, 2006

Athens; Island of Crete, western region (Botanical excursion)

#### Asia

USSR, Russia, Siberia, 1989

USA-USSR Scientific Exchange Program (Botanical)

Conference, Novosibirsk and Expedition to Altai Mts., Siberia

Russia, Siberia, 1993

USA-RUSSIA Scientific Exchange Program

Leader: Botanical Exchange Expedition on

Aquatic and Wetland Plants of Siberia (Novosibirsk,

Altai, Kemerovo, Khakassia Regions)

Japan, 2013 – visit with former exchange student

## Middle East

Jordan, 2012 (Holy Land tour--Petra, King's Highway north to Jordan Valley) Israel, 2012 (Holy Land tour)