# CIRRICULUM VITAE Edward W. Burkett

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## **Education**

Ph.D.: University of Wisconsin - Milwaukee, Milwaukee, Wisconsin Biological Sciences, May 1989.

M.S.: Indiana University of Pennsylvania, Indiana, Pennsylvania. Biological Sciences, May 1982.

B.S.: University of Pittsburgh at Johnstown, Johnstown, Pennsylvania. Biology, with honors, May 1979.

### **Professional Experience**

2001-Present: Professor of Biology at the University of Wisconsin – Superior

1996-2001: Associate Professor of Biology at the University of Wisconsin -- Superior 1990-1995: Assistant Professor of Biology at the University of Wisconsin -- Superior

1988-1990: Associate Lecturer, University of Wisconsin -- Milwaukee (UWM)

1987-1988: Lecturer, University of Wisconsin -- Milwaukee

## **Honors and Awards**

2000 Max Levine Award for Excellence in Contemporary Research

1999 Chancellor's Award for Model Teaching 1994

Model Advising Award.

1993 Chancellor's Award for Model Teaching

# **Courses Taught**

Bio100 Environmental Science	Bio112 Zoology	Bio115 Human Biology
Bio130 Principles of Biology	Bio270 Human A&P	Bio300 Marine Biology
Bio340 Ecology	Bio367 Ornithology	Bio380 Vertebrate Biology
Bio431 Animal Behavior	Bio420 Field Biology	Bio481 Coral Reef Ecology

Bio492 Biology Seminar Bio281 Honey Bee Biology

## **Research Interests**

Use of the proboscis extension reflex (PER) to evaluate the influence of pesticides on Honey Bee (*Apis mellifera*) learning and memory

Development and use of remote sensing to evaluate microenvironmental conditions within the hives of Honey Bees (*Apis mellifera*)

Selection and production of queen honey bees (*Apis mellifera*) that are hygienic and winter hardy in northern latitudes

Development of technologies to reduce winter mortality of Honey Bee (*Apis mellifera*) colonies in northern latitudes

The evolution and plasticity of "bold" and "shy" phenotypes in the Guppy (*Poecillia reticulate*)

The influence of age and sex on food preferences in the Madagascar Hissing Cockroach (*Gromphadorhina portentosa*)

The importance of male hissing to mate selection and dominance hierarchies in Madagascar Hissing Cockroaches (*Gromphadorhina portentosa*)

Investigation of how food deprivation influences aggression and territorial ownership in male Fiddler Crabs (*Uca pugilator*)

Assessment of temporal changes in coral reef community structure as a predictor of reef recovery following natural and anthropogenic disturbances of different types and magnitude.

## **Publications and Reports**

- Paddock, M.J., Burkett, E.W., et al. 2009. **Recent Region Wide Declines in Caribbean Reef Fish Abundance**. Current Biology 19(7) pp. 590 595
- Burkett, E.W., et al. 2009. **The Caye Caulker Research Initiative (CCRI): Annual Report**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant and permit requirement. Annual Report No. 8, 65 pg
- Burkett, E.W., et al. 2008. **The Caye Caulker Research Initiative (CCRI): Annual Report**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant and permit requirement. Annual Report No. 7, 89 pg
- Burkett, E.W., et al. 2007. **The Caye Caulker Research Initiative (CCRI): Annual Report**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant and permit requirement. Annual Report No. 6, 168 pg

- Burkett, E.W., et al. 2006. **The Caye Caulker Research Initiative (CCRI): Annual Report**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant and permit requirement. Annual Report No. 5, 90 pg
- Burkett, E.W. and Kerr, H. 2005. **The Importance of Disturbance Agents on the Coral Community of a Pristine Location.** Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant requirement. Annual Report No. 4, 9 pg
- Burkett, E.W., et al. 2005. **The Caye Caulker Research Initiative (CCRI): Phase III**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant requirement. Annual Report No. 3, 140 pg
- Burkett, E.W., et al. 2004. **The Caye Caulker Research Initiative (CCRI): Phase II**. Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant requirement. Annual Report No. 2, 153 pg
- Burkett, E.W., et al. 2003. **The Caye Caulker Research Initiative (CCRI): Phase I.** Written report submitted to the Coastal Zone Management Authority and the Belizean Fisheries Department as a grant requirement. Annual Report No. 1, 111 pg
- Burkett, E.W. 2000. **Disease Survey of the Coral Reefs of Cozumel, Mexico**. Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 23, 1-16 pg.
- Burkett, E.W. 2000. **Quantification of Community Structure of Paraiso Nearshore Fringe Reef**. Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 22, 1-12 pg.
- Burkett, E.W. 1999. **Quantification of Community Structure of Paraiso Nearshore Fringe Reef.**Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 21, 1-15 pg.
- Burkett, E.W. 1998. Field Manual of Coral Reef Ecology. 189 pg.
- Burkett, E.W. 1998. **An Anchor Damage Assessment of Cedar Pass Coral Reef.** Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 20, 1-8 pg.
- Burkett, E.W. and Markee, T. 1998. **Water Quality Assessment of the Marine National Park of Cozumel, Mexico.** Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 19, 1-20 pg.
- Burkett, E.W. 1998. **Quantification of Community Structure of Paraiso Nearshore Fringe Reef.**Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 18, 1-17 pg.
- Burkett, E.W. and Markee, T. 1997. **Heavy Metal Contamination of Marine Invertebrates**. Parque Marino Nacional "Arrecifes de Cozumel." Project Report No. 17, 1-6 pg.
- Burkett, E.W. 1997. Environmental Science: A Teaching Resource 150 pg.

- Burkett, E.W. 1997. **Quantification of Community Structure of Paraiso Nearshore Fringe Reef.**Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 16, 1-12 pg.
- Burkett, E.W. 1996. **Quantification of Community Structure of Paraiso Nearshore Fringe Reef.** Parque Marino Nacional "Arrecifes de Cozumel" Project Report No. 15, 1-26 pg.
- Burkett, E.W. 1990. **Differential roles of sexes in breeding Northern Flickers** (*Colaptes auratus*). Dissertation Abstracts 1-116 pg.

### **Presentations**

- Burkett, E.W. 2009. **Monitoring Coral Reef Resources: Is it really necessary?** Forest and Marine Reserves Association of Caye Caulker (FAMRACC), Caye Caulker, Belize. January
- Burkett, E.W. 2008. **Coral Reef Resource Management: Policy, Enforcement, Monitoring, Research and Education.** Forest and Marine Reserves Association of Caye Caulker (FAMRACC), Caye Caulker, Belize. January
- Burkett, E.W. 2008. Coral Reefs: Will They Survive? Superior Rotary Club invited speaker. April
- Burkett, E.W. 2007. **Time series analysis of reef benthic communities within the boundaries of the Caye Caulker Marine Reserve.** Forest and Marine Reserves Association of Caye Caulker (FAMRACC), Caye Caulker, Belize. January
- Burkett, E.W. 2006. Marine Protected Areas: Do they influence recovery of coral reef benthic communities. Forest and Marine Reserves Association of Caye Caulker (FAMRACC), Caye Caulker, Belize. January
- Burkett, E.W. 2006. **Coral Reefs: Will they survive?** Vice Chancellors Symposium, University of Wisconsin-Superior. April
- Burkett, E.W. 2006. **Wonders of the Coral Reefs**. Maritime Museum. Duluth, Superior. Invited Speaker. May
- Burkett, E.W. 2006. Caribbean Coral Reef Studies: Undergraduate Research at UWS. University of Wisconsin-Superior Foundation. Invited Speaker. October
- Burkett, E.W. 2006. **The Current Status of Coral Reefs**. The Duluth-Superior Engineering Society. Invited Speaker. December
- Burkett, E.W. 2005. **Coral Reef Management Strategies: The Importance of Monitoring.**Forest and Marine Reserves Association of Caye Caulker (FAMRACC), Caye Caulker, Belize.
- Burkett, E.W. 2005. **Benthic Community Dynamics of the Patch Reefs of the Caye Caulker Marine Reserve.** 34<sup>rd</sup> Annual Marine Benthic Ecology Meeting, Williamsburg, Virginia.

- Kerr, H. and Burkett, E.W. 2005. **The Importance of Disturbance Agents on the Coral Community of a Pristine Location.** Western Society of Naturalists, Monterrey, California.
- Burkett, E.W. 1999. **The Influence of Disturbance on the Community Structure of Paraiso Nearshore** Fringe Reef, Cozumel, Mexico. PUMA International Coral Reef Conference,
  Cancun, Mexico. (**Invited international guest speaker**)
- Burkett, E.W. 1999. The **Influence of Anthropogenic Disturbance on the Community Structure of Coral** Reefs. Parque Marino Nacional "Arrecifes de Cozumel" Cozumel, Mexico.
- Burkett, E.W. 1998. Coral Reefs: Diversity Threatened. Global Environmental Change Workshop. Ashland, WI. (Invited guest speaker)
- Burkett, E.W. 1998. Coral Reef Monitoring Programs: A Reef Health Management Technique. National Park Resource Management Unit. Cozumel, Mexico.
- Burkett, E.W. 1997. Elementary Education Science Curriculum Reform at UWS. NASA Project NOVA, Washington, DC. (Awarded Best Presentation)
- Burkett, E.W. 1997. The Coral Reefs of Cozumel Mexico: Human Impact Due to Pier Construction. Duluth Engineering Association.
- Burkett, E.W. 1996. **The Coral Reefs of Cozumel Island, Mexico**. Keynote Speaker for the Wisconsin Society of Science Teachers.
- Burkett, E.W. 1993. **The Wonders of Coral Ecosystems**. Keynote Address, Elementary and Middle School Science Conference, Superior, Wisconsin.
- Duncan, S., et al. 1988. **Auditory Mimicry in a Cavity nesting bird**. Wilson Society National Meeting, Philadelphia, Pennsylvania. (with E. Burkett and C. Niemczyk)
- Burkett, E.W. 1988. Differential roles of sexes in breeding Northern Flickers (*Colaptes auratus*). Wilson Society, National Meeting, Philadelphia, Pennsylvania.
- Burkett, E.W. 1988. The influence of weather on the hunting strategies, success rates and efficiencies of Wintering American Kestrels (*Falco sparverius*). Wilson Society National Meeting, Philadelphia, Pennsylvania.
- Burkett, E.W. 1982. The effect of weather conditions, habitat, and time of day on time allocation of wintering American Kestrels (*Falco sparverius*) in Indiana County Pennsylvania. Animal Behavior Society Meeting, Pennsylvania.