

# Mike Van Clef

*Stewardship Director,  
Strike Team Program Director*



Mike is the FoHVOS Stewardship Director and also serves as our Invasive Species Strike Team Program Director. He joined FoHVOS in 2007 and co-founded the Strike Team in 2008 with the goal of bringing greater efficiency and effectiveness to invasive species management. Mike has a Ph.D. in ecology from Rutgers University and over 25 years of experience in land stewardship, planning and research, working extensively in the evaluation and management of rare and invasive species and deer management. He has consulted with over 30 organizations in NJ including the NJ Invasive Species Council for which he prepared the New Jersey Strategic Management Plan for Invasive Species.

## Qualifications

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### Experience Summary

- Over 20 years of experience in non-profit, consultant and university settings
- Established private consulting firm, Ecological Solutions, LLC, with over 40 clients since 2006
- Received over \$1,000,000 in project grant funding over the last ten years (includes grants received in partnership with business clients)
- As Director of Science and Stewardship for The Nature Conservancy, managed staff and interns with an annual budget of \$150,000
- Ecoregional planning involving determination of target species and contiguous forest habitat areas, threat analyses, strategies and measurement of conservation success within a regional context

- Implementation of conservation strategies involving natural resource policy, invasive species management, Deer Management Programs, and outreach to private land owners and volunteers
  - Created practical, science-based forest monitoring protocols, Sentinel Seedlings and Forest Secchi, to rapidly evaluate forest health - method has been utilized by 15 organizations over 40 sites
  - Research and monitoring involving rare plant and animal species including American Chaffseed, Small Whorled Pogonia, Torrey's Mountain-mint, Bog Turtle and Northern Metalmark Butterfly; research involving radio telemetry studies of American Crow territorial and roosting behavior, Laughing Gull bird hazard to aircraft study, insect pollination and fruit removal of native shrubs; Doctoral research developing methods of predicting invasive potential of new plant introductions
  - Former member of New Jersey Invasive Species Council and New Jersey Habitat Incentive Team
  - Volunteer work for multiple organizations including: New Jersey Stewardship Roundtable, Highlands Coalition Natural Resources Committee, Endangered and Nongame Species Program, Schiff Natural Lands Trust, Mid-Atlantic Invasive Plant Council, and Partners for Plant Conservation
  - Extensive knowledge of flora and fauna including field collection and identification of aquatic and terrestrial vegetation, freshwater macroinvertebrates, fish, amphibians, reptiles, birds and mammals
  - Education and outreach experience including high school teaching certification, multiple college teaching assistantships and adjunct teaching experience, numerous presentations for community groups and volunteers
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## Education

- Ph.D. Ecology - Rutgers University, New Brunswick, New Jersey (January 2001)
  - B.S. Biology - Rutgers University, New Brunswick, New Jersey (May 1993)
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## Experience History

Ecological Solutions, LLC, Great Meadows, NJ (1/06-Present) -  
See [www.njecologicalsolutions.com](http://www.njecologicalsolutions.com)

**President** - Created consulting business with over 40 clients since 2006. Clients include many non-profit conservation groups and government entities ranging from municipal to federal. Work includes preparation of preserve and community stewardship plans covering tens of thousands of acres, establishment of invasive species management programs and Deer Management Programs. Co-founder of the New Jersey Invasive Species Strike Team and Hopewell Township Deer Management Advisory Committee. Multiple public presentations to encourage stewardship. Extensive volunteer work with multiple organizations.

## The Nature Conservancy, Skylands Program Office, Newton, NJ (2/01-12/05)

**Director of Science and Stewardship** - Contributed to an ecoregional planning process by determining priority sites for conservation in New Jersey. Created site conservation plans that identified target species & communities, their threats, strategies for conservation and measurements of conservation success. Strategies employed to mitigate threats included invasive species mapping & control, active participation in New Jersey's Invasive Species Council, numerous presentations to garden clubs regarding invasive species, development of methodologies to measure forest health and implementation of a deer management program.

Managed approximately 5,000 acres (14 nature preserves) in Northern New Jersey. Prepared \$150,000 annual budgets for science and stewardship activities. Supervised two land stewards, seasonal interns and volunteers. Developed an innovative outreach program called 'Partners in Private Land Conservation'. Coordinated volunteer workdays to assist in nature preserve management. Used GPS and GIS software to map natural resources. Scientific liaison to the public and individuals / organizations performing conservation work in New Jersey. Acted as interim Director of Skylands Program involving management of all aspects of administrative and conservation activities.

## Rutgers University, Graduate Program in Ecology and Evolution, New Brunswick, NJ (9/96-1/01)

**Doctoral Research** - Formulated techniques to predict invasive potential of new plant introductions. Methods included comparative performance of both invasive and non-invasive non-native species and their native congeners. Specific areas of research included seed dispersal, soil seed bank dynamics, seed predation, seedling establishment and growth patterns under field and greenhouse conditions and mechanisms of competitive dominance. Publications include:

Van Clef, M. 2001. Early life stage performance of native and non-native congeners of *Polygonum*, *Celastrus*, and *Parthenocissus*: Assessing methods of screening new plant introductions for invasive potential. Rutgers University, New Brunswick, NJ. 166 pages.

Van Clef, M. and E.W. Stiles. 2001. Seed longevity in three pairs of native and non-native congeners: assessing invasive potential. *Northeastern Naturalist* 8: 301-310.

## New Jersey Department of Environmental Protection, Trenton, NJ (6/98-1/01)

**Graduate Student Intern** - Annual monitoring of the federally endangered American Chaffseed. Research activities included effects of disturbance and prescribed burns on seedling establishment, the effect of heat on seed viability, seed longevity in the soil, population viability analysis and identifying environmental factors associated with existing colonies to determine appropriate reintroduction sites.

Roy F. Weston, Inc./REAC, U.S. EPA/ERT, Edison, NJ (8/93-8/96)

**Biologist** - Ecological inventory and habitat quality assessment at contaminated Superfund sites and uncontaminated reference sites. Ecological risk assessment investigating contaminant threats to aquatic and terrestrial species. Researched and implemented phytoremediation of contaminated groundwater using hybrid poplar trees. Large-scale study of a PCB- and mercury-contaminated estuarine marsh that used various techniques (minnow traps, otter trawl, and hoop nets) to collect organisms (fiddler crabs, brown shrimp, killifish, spot, and diamondback terrapin) for body burden analyses.