

SCIENTIFIC STAFF, JULY 2001 - JUNE 2003

SCIENTIFIC STAFF:

THE INSTITUTE OF ECOSYSTEM STUDIES IS COMPRISED OF 16 CORE STAFF SCIENTISTS. THEY ARE AUGMENTED BY THREE INTERNATIONAL ADJUNCT SCIENTISTS AND RESIDENT POSTDOCTORAL RESEARCHERS.

"MY VISION FOR IES WAS SIMPLE. GATHER A GROUP OF BRIGHT SCIENTISTS, GIVE THEM ACADEMIC FREEDOM, PROMOTE CREATIVITY, FOSTER GROUP INTERACTIONS AND NURTURE THE COOPERATIVE PURSUIT OF NEW ECOLOGICAL IDEAS."

DR. GENE E. LIKENS
DIRECTOR, INSTITUTE OF ECOSYSTEM STUDIES

Juan J. Armesto, Ph.D.

Forest Ecologist
Adjunct Scientist (Facultad de Ciencias, Universidad de Chile, Santiago, Chile)
Functions of biodiversity in ecosystems; plant-animal mutualisms; conservation ecology in human-dominated landscapes

Alan R. Berkowitz, Ph.D.

Plant Ecologist
Head of Education
Urban ecosystem research and education; schoolyard ecology; undergraduate and teacher education; fostering a diverse ecological profession

Seth W. Bigelow, Ph.D.

Plant Ecologist
Plant-soil interactions; plant influences on water and nutrient cycles; silviculture

Mary L. Cadenasso, Ph.D.

Plant Ecologist
Function of spatial heterogeneity in ecosystems; structure, function, and dynamics of urban land cover; integration of ecological and social sciences; function of ecological boundaries across systems and scales

Charles D. Canham, Ph.D.

Forest Ecologist
Neighborhood dynamics of forest ecosystems; linkages between tree population dynamics and forest ecosystem processes; effects of vertebrate herbivores on forests; wind disturbance regimes in temperate and tropical forests; spatially-explicit models and likelihood estimation; sustainable management of forests

Nina M. Caraco, Ph.D.

Biogeochemist
Nutrient cycling in aquatic ecosystems

Jonathan J. Cole, Ph.D.

Aquatic Microbiologist
Aquatic microbiology; regulation of aquatic bacteria; gas flux; biogeochemistry

Valerie T. Eviner, Ph.D.

Ecosystems Ecologist
Connections between population, community, and ecosystem ecology; effects of plant species and plant communities on ecosystems; ecosystem effects of plant interactions; sustainable agroecology; biogeochemical interactions; ecology of invasive and weedy plant species; biodiversity and ecosystem function; grassland ecology

Holly A. Ewing, Ph.D.

Ecologist
Ecosystem development; terrestrial-aquatic linkages; soil development; plant-soil interactions

Stuart E.G. Findlay, Ph.D.

Aquatic Ecologist
Detritus dynamics; microbial ecology; interactions between streamwater and shallow groundwater; dissolved organic carbon; ecology of the Hudson River and tidal wetlands

Ross D. Fitzhugh, Ph.D.

Biogeochemist
Effects of acidic deposition on stream chemistry; effects of climate change on element cycling and loss; influences of plant-microbial-soil interactions on element cycling and loss

Brett J. Goodwin, Ph.D.

Landscape Ecologist
Spatial structuring of populations; insect population dynamics in heterogeneous landscapes; ecological modeling; animal movement

Peter M. Groffman, Ph.D.

Microbial Ecologist
Terrestrial microbial ecology; ecosystem and landscape biogeochemistry; transformation of environmental pollutants

Jorge L. Gutierrez, Ph.D.

Ecologist
Organisms as ecosystem engineers; ecosystem processes in coastal salt-marshes; ecology of marine soft-sediment communities

Kathleen Hogan, Ph.D.

Educational Psychologist
Research on children's and adolescents' science learning; teacher education; ecology curriculum and program development

Jonathan M. Jeschke, Ph.D.

Evolutionary Ecologist
Answering general ecological and evolutionary questions; developing general models and evaluating their predictive strength based on empirical data

Clive G. Jones, D. Phil.

Ecologist
Linking species and ecosystems; ecosystem engineering — effects of environmental modification by organisms on population, community and ecosystem processes; ecological theory

Sujay S. Kaushal, Ph.D.

Ecologist
Aquatic and landscape biogeochemistry; transformation and fate of environmental pollutants; paleoecology

Gene E. Likens, Ph.D.

Ecologist
Director, Institute of Ecosystem Studies
G. Evelyn Hutchinson Chair in Ecology
Ecosystem analysis; biogeochemistry; limnology; effects of air pollution on ecosystems

Kathleen M. LoGiudice, Ph.D.

Animal Ecologist
Mammalian ecology; ecology of infectious disease; host community dynamics of Lyme disease; effects of infectious disease on endangered species

Gary M. Lovett, Ph.D.

Plant Ecologist
Forest nutrient cycling; responses of forest ecosystems to stress; impacts of exotic species on forests; atmosphere-canopy interactions

Winsor H. Lowe, Ph.D.*Ecologist*

The effects of animal dispersal on population dynamics, community ecology, and ecosystem processes; ecological mechanisms underlying species and community-level responses to human disturbance

Patrick H. Martin, Ph.D.*Forest Ecologist*

Invasion ecology; application of SORTIE, a spatially-explicit model of forest dynamics, to the invasion of eastern forests by exotic trees; disturbance and fire ecology; controls on plant community organization in tropical cloud forests

Roxane Maranger, Ph.D.*Aquatic Ecologist*

Regulation of bacteria; role of bacteria in nutrient and carbon cycling

Cheryl McCutchan, Ph.D.*Plant Physiological Ecologist*

Ecophysiology of plant respiration; thermal acclimation of respiration; effects of soil chemistry on plant physiology

James H. McCutchan, Jr., Ph.D.*Ecologist*

Biogeochemistry; food sources for aquatic consumers; stable isotope techniques; ecosystem metabolism; effects of temperature on biological processes

Richard S. Ostfeld, Ph.D.*Animal Ecologist*

Ecology of infectious disease; links between biodiversity, habitat destruction, and disease transmission; community responses to pulsed acorn production; white-footed mice as a "hub" species

Michael L. Pace, Ph.D.*Aquatic Ecologist**Assistant Director, Institute of**Ecosystem Studies*

Aquatic ecosystems; food webs; microbial ecology

Steward T.A. Pickett, Ph.D.*Plant Ecologist*

The function of spatial heterogeneity in ecosystems; ecological studies of urban systems

Eric M. Schauber, Ph.D.*Animal Ecologist*

Population dynamics of forest animals; modeling community interactions; foraging behavior

Moshe Shachak Ph.D.*Ecologist*

Adjunct Scientist (Mitrani Center for Desert Ecology, The Jacob Blaustein Institute for Desert Research, Ben-Gurion University of the Negev, Sede Boqer, Israel) Desert ecology; watershed ecology; multifold ecological systems; ecological management; organisms as ecosystem engineers

Doris Soto, Ph.D.*Aquatic Ecologist*

Adjunct Scientist (Laboratorio de Ecología Acuática, Facultad de Pesquerías y Oceanografía, Universidad Austral de Chile, Puerto Montt, Chile) Nutrient cycling and food webs; multiple water uses; environmental impact assessment and management of aquaculture effects on fresh water and marine coastal waters

David L. Strayer, Ph.D.*Freshwater Ecologist*

Ecology and roles of freshwater invertebrates; exotic species; endangered invertebrates, including pearly mussels; ecology of streams, rivers, and groundwater

Maria Uriarte, Ph.D.*Plant Ecologist*

Forest community ecology; forest models; application of game theory to plant competition

Rodney T. Venterea, Ph.D.*Soil Scientist*

Soil physics; nutrient transformations and mass transport in forest and agricultural soils; trace gas emissions; process modeling; soil and groundwater remediation

Kathleen C. Weathers, Ph.D.*Forest Ecologist**Head of Laboratory Services*

Chemical composition and deposition of pollutants and nutrients; forest nutrient cycling; ecology of montane ecosystems; influence of landscape heterogeneity on ecosystem function; aquatic-terrestrial fluxes

Raymond J. Winchcombe, B.S.*Wildlife Biologist**Manager of Field Research**Facilities*

White-tailed deer population management via controlled access hunting