All information products (i.e., databases, publications, analytical tools and photos) are keyworded using the preferred keyword list shown below. The list is hierarchical and includes 34 top-level keywords (categories), second-level descriptive keywords, and third-level finely-detailed keywords. Keywords should be selected from all representative top-level categories. Top-level keywords are often too vague and second-level keywords are generally better suited to represent an information product. Fine-grained third-level keywords can be used when appropriate. New keywords can be added to the list, if needed. Please suggest any additions to the Andrews LTER Information Manager.

AQUATIC/RIPARIAN HABITAT
- Aquatic ecosystems
- Stream communities
- Stream gradient
- Stream order
- Stream substrates
- Riparian ecosystems

BIOLOGICAL DIVERSITY
- Biological control
- Diversity measurement
- Endangered species
- Exotic Species
- Genotypic diversity
- Species richness
- Structural diversity

BIOMASS
- Biomass (algae)
- Biomass (conifers)
- Biomass (debris/detritus)
- Biomass (fish)
- Biomass (fungi)
- Biomass (invertebrates)
- Biomass (lichens)
- Biomass (litterfall)
- Biomass (microbial epiphytes)
- Biomass (mosses)
- Biomass (roots)
- Biomass (soil)
- Biomass (streams)
- Biomass (trees)
- Biomass (understory)
- Biomass (vascular plants)
- Biomass (vertebrates)
- Biomass (woody debris)

CLIMATE/METEOROLOGY
- Air temperature
- Atmospheric deposition
- Biometeorology
- Canopy temperature
- Climate change
  - Greenhouse effect
- El Nino/Southern Oscillation (ENSO)
- Evaporation

METEOROLOGICAL MEASUREMENTS
- Dew point temperature
- Relative humidity
- Snow moisture
- Vapor pressure
- Wind speed and direction
- Microclimate
- Photoperiod
- Precipitation
- Interception
- Throughfall
- Solar radiation
- Albedo
- Photosynthetically active radiation (PAR)

CONSERVATION BIOLOGY
- Reserve design

DATA & INFORMATION MANAGEMENT
- Cyberinfrastructure
- Computer networks
- Information managers
- Wireless networks
- Data archive
- Bibliography
- Climate data
- Environmental data
- Hydrology data
- Ecoinformatics
- Data access
- Data exchange
- Information systems
- Knowledge base
- Training
- Metadata
- Metadata standards
- Quality assurance

DISTURBANCE
- Canopy gaps
- Deforestation
- Earthquakes
- Erosion
- Fire
- Floods
- Grazing
- Hurricane
- Insect defoliation
DISTURBANCE (continued)
Mass movement
Pathogens
Storms
Timber harvesting
Volcanic
Wind
Windthrow

ECOLOGY
Autecology
Biogeochemistry
Biogeography
Biological legacies
Community dynamics
Community structure
Dendroecology
Disturbance ecology
Ecology
Ecophysiology
Ecosystems
Community metabolism
Comparative analysis
Complexity
Ecosystem dynamics
Ecosystem function
Ecosystem monitoring
Environmental gradients
Environmental indexes and variables
Forest composition
Forest structure
Forest-stream interactions
Functional groups
Organic matter
Variability, natural or historic range of
Variability, spatial
Variability, temporal
Entomology
Genecology
Morphology
Stream morphology
Phenology
Plant community ecology
Habitat types
Plant associations
Vegetation types
Plant physiology
Site classification
Stream ecology
Detritus
Fish habitat
Leaf retention
River continuum concept
Stream functions
Vegetation
Riparian vegetation

ECOSYSTEM PROCESSES
Bioenergetics
Carbon
carbon cycling
Carbon dioxide flux
Decomposition
Aquatic decomposition
Terrestrial decomposition
Disturbance processes
Energy budget
Litterfall
Nutrients
Calcium
Nitrogen
Nitrogen cycling
Nitrogen mineralization
Nutrient budgets
Nutrient stores
Phosphorus
Oxygen
Plant distribution patterns
Plant-soil interactions
Primary production
Productivity
Leaf area
Long-term productivity
Site index
Soil productivity
Stem analysis
Secondary production
Soil processes
Solution chemistry
Solution transport
Succession
Gap dynamics
Secondary succession
Woody debris
Coarse woody debris - aquatic
Coarse woody debris - terrestrial
Fine woody debris
Log measurements

ESTUARINE HABITAT

GENETICS
DNA
Mitochondrial DNA
Nuclear DNA
Hybridization
GEOLOGY/GEOMORPHOLOGY
- Alluvial deposits/forms
- Debris dams
- Step pools
- Wood movement
- Bedrock geology
- Debris slides/flows
  - Debris flow physics
- Experimental structures
  - Debris flow flume
  - Flume studies
- Geomorphology
  - Channel geomorphology
  - Hillslope-stream interactions
- Glaciation
- Landslides/earthflows
  - Landslide causes/consequences
  - Movement monitoring
  - Slope stability
- Minerology
- Sedimentation
  - Sediment budgets
  - Sediment routing
  - Sediment yield
- Stratigraphy
- Topography
- Weathering

HYDROLOGY/WATER
- Cumulative watershed effects
- Groundwater processes
  - Bypass flow
  - Subsurface flow
- Hydrologic processes
  - Current velocity
  - Flood processes
  - Hydrocycle
  - Rainfall-runoff
  - Road effects
  - Surface water
  - Water balance
- Hyporheic zone
- Snow hydrology
- Streamflow
  - Low flows
  - Peak flows
- Water quality
  - Water chemistry
  - Water temperature
  - Watershed
    - Experimental watershed studies
    - Watershed analysis

INVERTEBRATES
- Aquatic invertebrates
  - Mollusks
- Arthropods
  - Arachnids
  - Beetles
  - Butterflies
  - Insects
  - Moths
  - Soil invertebrates

HISTORY
- Climate history
- Disturbance history
- Fire history
- Human history
  - Paleoclimate
  - Paleoecology

HUMAN DIMENSION
- Aesthetics
- Attitudes/perceptions
- Economics
- Ecosystem services
- Education
- Employment
- Environmental ethics
- Land ownership
- Politics
- Public interest
- Public participation
- Public values
- Social acceptability/learning
- Social assessments/surveys

LANDSCAPE ECOLOGY
- Complex terrain
- Digital Elevation Model (DEM)
- GIS
- Landscape analysis
- Landscape diversity
- Landscape dynamics
  - Road networks
  - Stream channel networks
- Landscape management
- Landscape pattern
  - Contagion index
  - Ecoregion
  - Ecotones
  - Edges
  - Fragmentation
  - Patches
  - Landscape scales
  - Landscape structure
    - FRAGSTATS

MARINE HABITAT
METHODS
- Acetylene reduction
- Allometric equations
- BIOPAK
- Chemical analysis
  - Tissue samples
- Chromatography
- Chronosequence
- Dendrochronology
- Eddy covariance
- Global positioning systems (GPS)
- Gravimetric sampling
- Hypsograph
- Hysteresis
- Isotopes
  - Carbon isotope
  - Oxygen isotope
- Litter bags
- Mapping
- Permanent plots
- Photography
  - Aerial photography
  - Hemispherical photography
- Radio telemetry
- Reference stands
- Reflectometry
- Resin bags
- Sampling methodology
- Sensor arrays
- Spatial analysis
- Statistics
  - Imputation
  - Logistic regression
  - Ordination
  - Probability analysis
  - Spatial statistics
    - Tasseled cap transformation
- Tracers
- Stream tracer
- Wavelet analysis

MICROBIOTA
- Bacteria

MODELING
- Animal-habitat modeling
- Carbon modeling
- Climate modeling
- Decision support modeling
- Ecosystem modeling
- Hydrologic modeling
  - Hydrology - vegetation model
- Landscape modeling
- Population modeling
- Precipitation modeling
- Vegetation modeling

PHYSIOLOGICAL PROCESSES
- Condensation
- Evapotranspiration
- Germination
- Growth
- Hydraulic redistribution
- Moisture stress
- N-fixation
- Photosynthesis
- Respiration
  - Soil respiration
- Sapflow
- Shade
- Temperature stress
- Transpiration
  - Stomatal behavior
- Vision
- Water conductance

PLANTS
- Actinorhizal
- Algae
- Bark
- Bryophytes
- Cones
- Cotyledons
- Endophytes
- Epiphytes
- Ferns
- Flowers
- Foliage
- Forbs
- Fungi
  - Mushrooms/sporocarps
  - Truffles
- Lichens
- Liverworts
- Mosses
- Mycorrhizae
- Needles
- Periderm
- Periphyton
- Plant cover
- Pollen
- Roots
- Seedlings
- Seeds
  - Seed banks
  - Seed beds
  - Seed dispersal
  - Seed germination
  - Seed production
  - Seed trees
  - Seed zones
- Shrubs
- Sprouts
- Trees
  - Conifers
  - Hardwoods
- Tree measurements
- Vascular plants
- Wood
  - Lignin
  - Sapwood
  - Tannin
POLLUTION
Air pollution
Acid precipitation
Environmental pollutants
Oil spill
Soil pollution
Trifluoroacetate
Water pollution

POPULATION DYNAMICS
Adaptation
Animal populations
Bird populations
Fish populations
Breeding
Competition
Demography
Age distribution
Age structure
Mortality
Establishment
Fungi populations
Microbial populations
Migration
Plant populations
Population structure
Resistance and resilience
Survival
Vagility

PROGRAM ADMINISTRATION
Administration
Cascade Center for Ecosystem Management (CCEM)
Coniferous Forest Biome
Environmental research
Intersite studies
Long-term studies
Synthesis studies
International
International Biological Program
International Long-Term Ecological Research-LLTER

REMOTE SENSING
Accuracy assessment
Airborne imagery
Calibration
Change detection
Classification
Land cover
Satellite data
AVHRR
AVIRIS
LIDAR
Landsat TM/ETM+
Landsat/Landsat MSS
MODIS
Radar
SPOT panchromatic
Spatial properties
Spatial coherence
Spectral properties
Thermal properties
Surface temperature
Thermal energy

RESOURCE MANAGEMENT
'New Forestry'/New Perspectives
Adaptive management
Chemicals
Fertilizers
Fire retardants
Herbicides
Pesticides
Ecosystem management
Erosion control
Fire management
Prescribed fire
Fisheries management
Flood control
Forest management
Forest certification
Forest planning
FEMAT
Forest policy
Forest practices
Forest products
Christmas trees
Special forest products
Habitat management
Hazard assessment
Inventory
Land use
Landscape planning
Monitoring
  Monitoring programs
Nursery management
Pest management
Public assessments
Regional assessments
Restoration
  Dam removal
  Ecosystem restoration
  Landscape restoration
  Soil restoration
  Stream restoration
  Watershed restoration
Riparian management
River regulation
Road management
Stream management
Sustainability
Timber management
  Growth and yield
  Logging systems
  Salvage logging
Vegetation management
Watershed management
Wildlife management
  Wildlife trees
  Young stands

Soil stability
Soil structure
Soil temperature

TAXONOMY/SYSTEMATICS
  Keys
  Taxonomy
    Species identification
    Species lists
  Taxonomic checklists

TERRESTRIAL/UPLAND HABITAT
  Agricultural systems
  Forest ecosystems
    Canopy communities
    Clearcuts
    Forest floor
    Forest understory
    Managed forests
    Mature forests
    Natural forests
    Old-growth forests
    Plantations
    Tropical forests
    Young forests
  Meadows
  Roads
  Shrub/grassland communities
  Soil/Subsoil
    Tropical soils

SILVICULTURE
  Green tree retention
  Harvest methods
    Clearcutting
    Staggered setting
    Structural retention
  Harvest pattern
  Mensuration
  Regeneration
  Silvicultural systems
  Slash/broadcast burning
  Thinning

TROPHIC RELATIONS
  Detritus food quality
  Detritus processing
  Feeding strategies
  Food chains/webs
    Parasitism
    Herbivory
    Mycophagy
    Predation

VERTEBRATES
  Birds
  Fish
    Salmon
    Trout
  Herpefauna
    Amphibians
    Reptiles
    Salamanders
  Mammals
    Bats
    Beavers
    Cattle
    Deer
    Elk
    Squirrels
    Wildlife