

WATER RESOURCES RESEARCH INTERESTS
IN THE
COLLEGES AND UNIVERSITIES
OF
NORTH CAROLINA

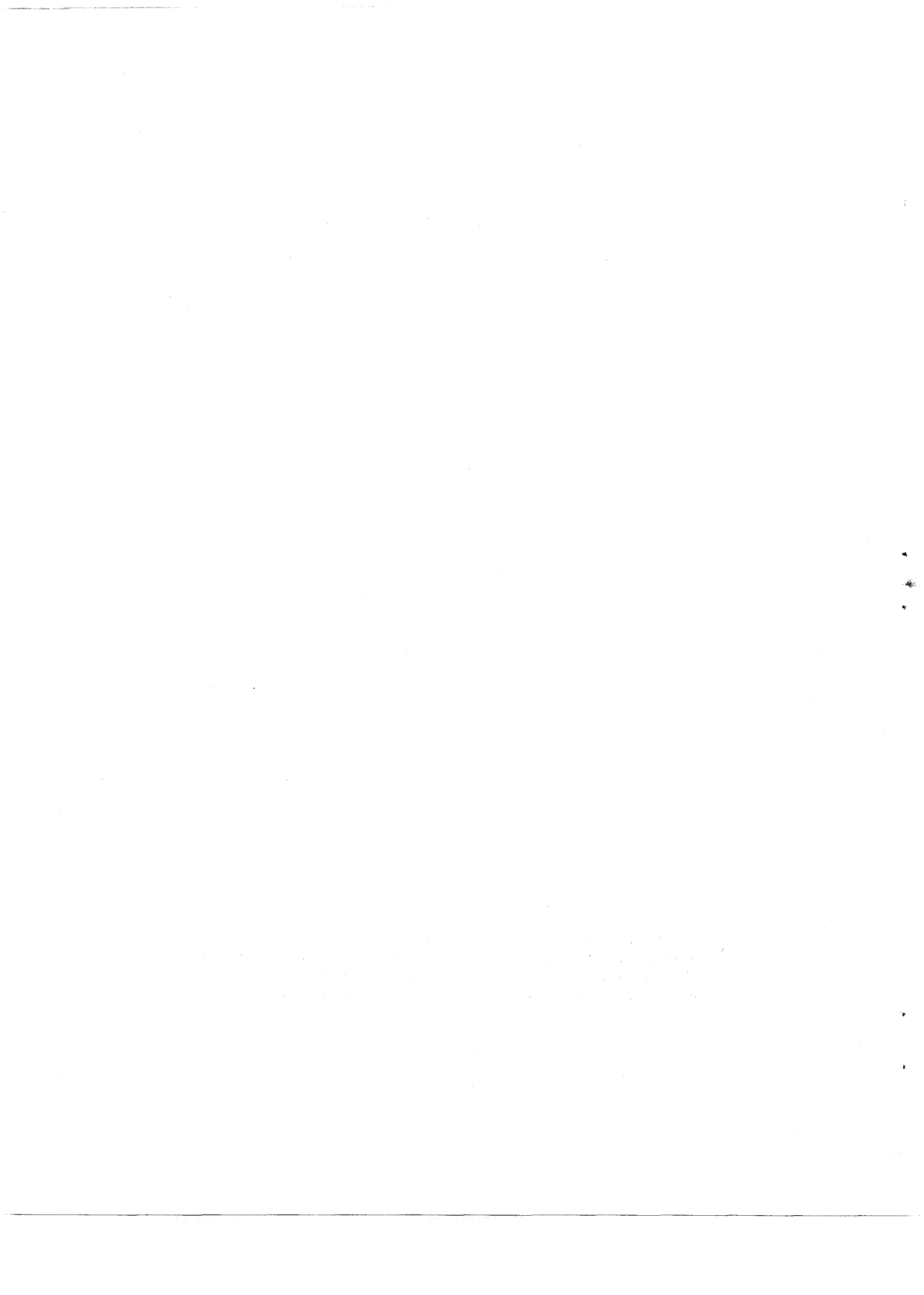
An
Institute Report

July 1, 1970

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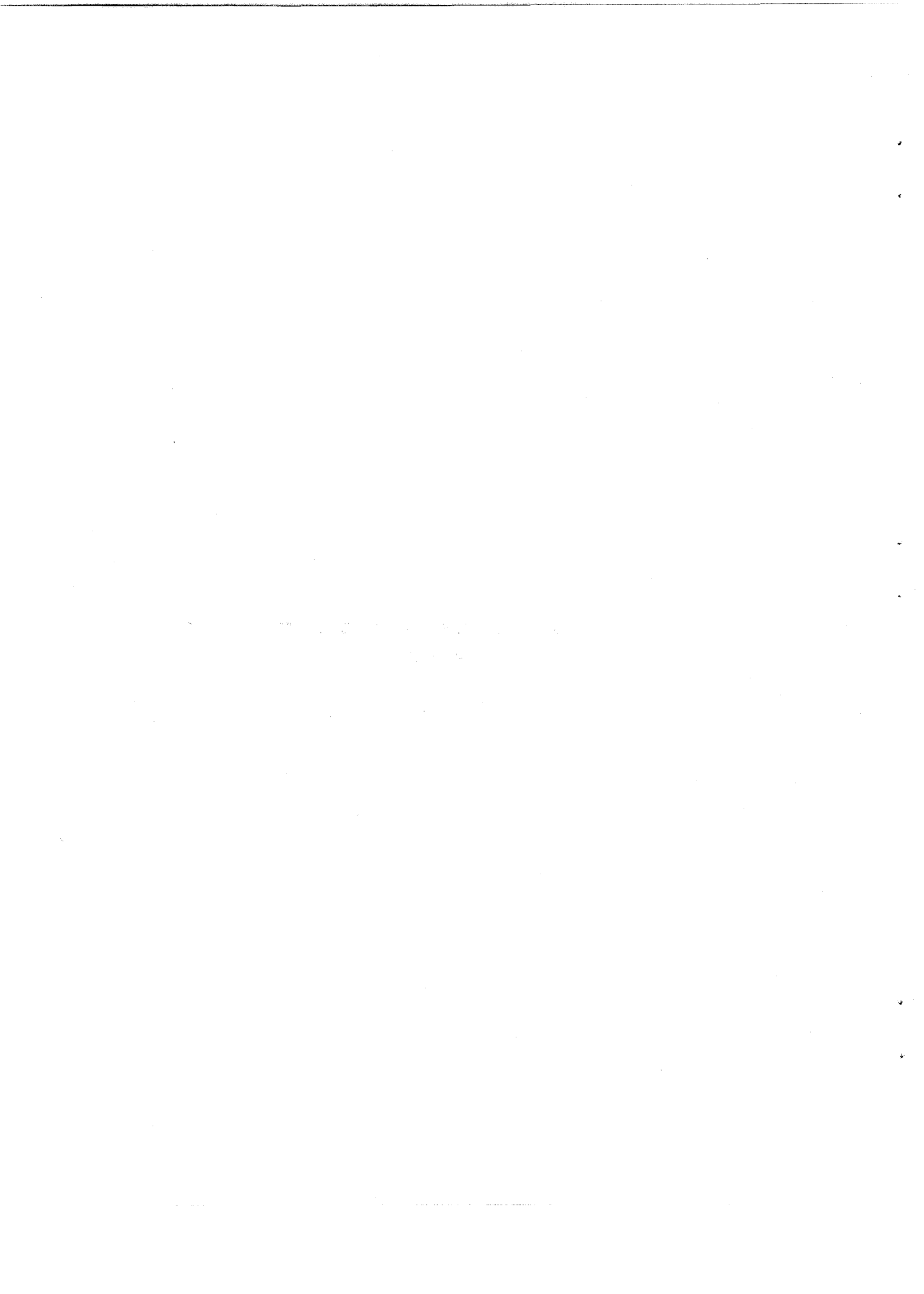


CONSOLIDATED UNIVERSITY OF NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE
UNIVERSITY OF NORTH CAROLINA AT GREENSBORO



NORTH CAROLINA STATE UNIVERSITY
AT RALEIGH



Consolidated University of North Carolina - North Carolina State University

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Ag & Life Sc.	Animal Science	Dr. Albert J. Clawson	Disposal of swine wastes
"	"	*Dr. James M. Leatherwood	Utilization of fibrous wastes as animal nutrients
"	"	*Dr. Harold A. Ramsey	Utilization of fibrous wastes as animal nutrients
"	Botany	*Dr. Charles E. Anderson	Morphology, anatomy of aquatic plants
"	"	*Dr. Arthur W. Cooper	Coastal ecology, salt marshes, forest ecology, and productivity of land plants
"	"	*Dr. H. E. Schlichting, Jr.	Algal ecology
"	"	*Dr. Larry A. Whitford (Emeritus)	Fresh-water algal flora and ecology
"	Crop Science	Dr. Joseph C. Burns	Water management for pasture, hay and ensilage crops with interest in changes in nutritive value under stress conditions
"	"	Dr. Douglas S. Chamblee	Moisture levels and plant management systems for optimal water efficiency and growth of forage species and the relative importance of moisture as a factor limiting establishment, growth and adaptation of major forage species
"	"	Dr. Frederick T. Corbin	Microbial detoxication of herbicides
"	"	Dr. William B. Gilbert	Water management for turf grasses and turf establishment and maintenance along high-ways

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Ag & Life Sc.	Crop Science	*Dr. Jerome B. Weber	The chemistry and biological availability of pesticides and other organic chemicals applied to soils
"	"	Dr. A. D. Worsham	Water and soil conservation and pesticide and plant nutrient pollution reduction through no-tillage crop production
"	Economics	*Dr. W. M. Crosswhite	Water use and waste control in food processing industry
"	"	Dr. Edward W. Erickson	Efficiency of resource allocation and water resources economics
"	"	Professor Cleon Harrell	Benefit-cost analysis and economics of recreation
"	"	*Mr. John Macon	Industrial water use and waste control
"	"	*Dr. James A. Seagraves	Stream standards and optimal charges for industrial wastes
"	Entomology	*Dr. Richard C. Axtell	Biology and control of flies and gnats associated with man and aquatic situations
"	"	*Dr. J. R. Bradley	Effects of pesticides on aquatic food chains with emphasis on aquatic insects
"	"	Dr. Walter C. Dauterman	Structure-activity relationship of organo-phosphate insecticides
"	"	*Dr. Frank E. Guthrie	Mechanisms of pesticide toxicity
"	"	*Dr. Kenneth L. Knight (Head of Department)	Biology and control of aquatic insect pests
"	"	*Dr. Thomas J. Sheets (Dir., Pesticides Lab)	Water quality as affected by agricultural land runoff with emphasis on pesticides

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Ag & Life Sc.	Food Science	*Mr. Roy E. Carawan	Water use and waste control in the food processing industries
"	"	Dr. Dan E. Carroll	Wastes from sweet potato processing facilities; utilization of food processing wastes using fermentation
"	"	Dr. V. A. Jones	Water use and waste control in the dairy processing industry
"	"	Dr. Frank B. Thomas	Scallop viscera utilization; utilization and prevention of seafood processing wastes
"	"	Dr. Neil B. Webb	Prevention and utilization of protein wastes from food processing plants; scallop viscera utilization
"	Horticultural Science	*Dr. Conrad H. Miller	Irrigation and atmospheric cooling for vegetable production
"	"	*Dr. Richard C. Unrath	Environmental control of apples using sprinkler irrigation
"	Plant Pathology	*Dr. Ellis B. Cowling	Enzymatic degradation of lignin by microorganisms and development of useful products from pulp and paper wastes
"	Soil Science	*Dr. S. W. Buol	Relationship of soil and water
"	"	*Dr. James W. Gilliam	Release of fertilizer nitrogen and phosphorus to ground and surface waters
"	"	*Dr. J. Fulton Lutz	Water conservation, storage and movement in soils availability to plants, contamination by agricultural chemicals (herbicides, pesticides, fertilizers, etc.)
"	"	*Dr. Charles B. McCants	Infiltration, percolation, leaching of mineral elements & soil moisture regimes

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Ag & Life Sc.	Soil Science	*Dr. R. E. McCollum	Irrigation and atmospheric cooling for vegetable production
"	"	*Dr. Charles D. Sopher	Interactions between rainfall distribution and plant growth
"	"	*Dr. David Terry	Infiltration, percolation, leaching of mineral elements and soil moisture regimes
"	"	*Dr. W. G. Woltz	Infiltration, percolation, leaching of mineral elements and soil moisture regimes
"	"	*Dr. S. B. Weed	Inactivation and loss of pesticides from soils
"	"	*Dr. W. W. Woodhouse, Jr.	Effect of vegetation on water movement in and over soils, water losses, stabilization against erosion and water use by plants
"	Zoology	*Dr. B. J. Copeland	Productivity and community structure in estuaries as affected by environmental stresses
"	"	Dr. David E. Davis (Head of Department)	Animal populations associated with land disposal of municipal and industrial wastes
"	"	*Dr. William W. Hassler (Dir., Hatteras Lab)	Life history studies and population dynamics of marine and estuarine fishes
"	"	*Dr. F. Eugene Hester (Leader Coop. Fishery Unit)	Fishery and waterfowl biology
"	"	*Dr. John E. Hobbie	General limnology, heterotrophy in fresh and marine waters, effects of thermal effluents on estuaries

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
<p><u>Note:</u> The following members of the professional staff, Center for Estuarine and Menhaden Research, Bureau of Commercial Fisheries, Fish and Wildlife Service, Department of the Interior, Beaufort, North Carolina, hold adjunct appointments on the Department of Zoology Faculty:</p>			
Ag & Life Sc.	Zoology	*Dr. Joseph W. Angelovic *Dr. Ford A. Cross *Dr. Theodore R. Rice *Dr. Richard B. Williams *Dr. Douglas A. Wolfe	Marine, estuarine and radio-ecology
Design	Landscape Architecture	*Professor R. R. Wilkinson	Integration of multiple objectives of urbanizing watersheds through landscape planning techniques
Engineering & Ag & Life Sc.	Biological & Agricultural Engineering	*Professor David H. Howells (Dir., Water Resources Research Institute)	Water supply and pollution control
"	"	*Dr. Frank J. Humenik	Biological treatment of waste water
"	"	*Dr. George J. Kriz	Drainage, irrigation and agricultural pollution control
"	"	*Dr. R. Wayne Skaggs	Heat and water movement in porous media
"	"	Dr. Robert S. Sowell	Operations research applications
"	"	*Mr. Ronald E. Sneed	Water requirements of plants
"	"	*Dr. Cliff R. Willey	Water movement in soil, drainage, and water use
"	"	*Dr. Ralph E. Williamson	Drainage requirements of plants
"	"	*Dr. Edward H. Wiser	Statistical methods and simulation in hydrology

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Engineering	Chemical Engineering	*Dr. Harold Hopfenberg	Membrane separations including reverse osmosis, ultrafiltration, and pervaporation applied to ocean, brackish, waste, by-product, and biological water solutions
"	"	Dr. David B. Marsland	Engineering economy in pollution abatement
"	"	*Dr. Vivian T. Stannett	Membrane separations including reverse osmosis, ultrafiltration, and pervaporation applied to ocean, brackish, waste, by-product, and biological water solutions
"	Civil Engineering	*Dr. Michael Amein	Unsteady flows, river and estuary analysis, wave motion
"	"	*Dr. Newton V. Colston, Jr.	Synthetic flow models, hydrology, estuarine pollution, food processing wastes, inplant control and water supply
"	"	*Dr. William S. Galler	Application of systems analysis to water problems
"	"	Mr. Donald R. Johnston	Pollution control
"	"	*Dr. A. I. Kashef	Soil mechanics, seepage through dams, water well hydraulics, salt water intrusion, irrigation and drainage
"	"	Dr. Jerry L. Machemehl	Coastal engineering
"	"	Prof. Charles Smallwood	Water supply and pollution control; industrial wastes
"	Engineering Research	Mr. Robert D. Kauffman (Minerals Research Lab)	Recovery of by-products from feldspar plant tailings
"	"	Mr. W. T. McDaniel (Chief Engineer, Minerals Research Lab)	Utilization of mining and ore processing wastes

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Engineering	Engineering Research	*Mr. Philip Neal (Minerals Research Lab)	Tails utilization
"	"	Mr. Immo H. Redeker (Minerals Research Lab)	Recovery of by-products from feldspar plant tailings
"	"	Prof. F. M. Richardson	Removal of radioactive contaminants from water
"	Mechanical & Aerospace Engineering	Professor J. S. Doolittle	Saline water conversion, particularly in the field of thermodynamics and heat transfer
"	"	Dr. Francis J. Hale	Dynamic analysis and control system design of desalinization processes
"	"	Dr. M. Necati Ozisik	Heat and mass transfer problems; diffusion problems related to removal of aerosols or particulates from fluid streams; research associated with the effectiveness of heat exchangers in association with saline water conversion; and problems of thermal pollution
"	"	Dr. J. E. Sunderland	Heat and mass transfer including the absorption of solar radiation by water
"	Nuclear Engineering	*Professor J. R. Bohannon	Application of neutron activation analysis and other nuclear methods to water resources management and research with particular attention to trace element detection and industrial waste process control
"	"	*Dr. T. S. Elleman	Radioactivity in the environment
Forest Resources	Forestry	*Dr. Charles B. Davey (Head of Department)	Prevention of water pollution through processing of agricultural wastes to convert them into useful soil amendments

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Forest Resources	Forestry	*Dr. William L. Hafley	Forest influences; biometry with emphasis on sampling and regression problems related to land resources
"	"	Professor J. W. Johnson	Silviculture and forest soil interrelationships
"	"	*Dr. Joe O. Lammi	Application of aerial photo interpretation to the studies of land use and watershed management
"	"	*Dr. T. Ewald Maki	Forest influences (humus type infiltration interrelationships; soil stabilization; stand density and composition-evapotranspiration, site quality alteration and moisture control effects on forest production
"	"	Dr. Thomas O. Perry	Nitrogen cycling in forest ecosystems
"	"	*Dr. Donald H. J. Steensen	Economics of forest resources and wood utilization
"	Recreation Resources Administration	*Professor G. A. Hammon	Description and quantification of resource-based recreation opportunities
"	"	Professor T. I. Hines (Head of Department)	Human and economic values related to recreational use of water resources
"	"	Dr. Lewis Moncrief	Sociological implications of water development and use; recreation water policy
"	"	Professor C. C. Stott	Water-based recreation facilities
"	Wood & Paper Science	*Dr. H. M. Chang	Biological degradation and chemical modification of lignin
"	"	Dr. Eric L. Ellwood (Head of Department)	Processing and manufacturing of pulp and paper and the physics and chemistry of wood utilization
"	"	Professor R. G. Hitchings	Pulp and paper mill effluent control & reduction

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Forest Resources	Wood & Paper Science	*Dr. Peder Kleppe	Pollution abatements in forest products industry
"	"	*Dr. Knut Kringstad	High yield pulping and waste reduction aspects
"	"	*Professor C. N. Rogers	Water use and waste control in pulp and paper industry
Liberal Arts	Politics	Dr. William J. Block (Head of Department)	Rural zoning - including flood-plain zoning
"	Social Studies	Professor J. C. Wallace	Sociopolitical aspects of water resources management
"	Sociology & Anthropology	*Dr. A. Clarke Davis	Social and social-psychological aspects of water-related problems
"	"	Dr. Selz C. Mayo (Head of Department)	Sociological aspects of water resources management
Physical Sciences & Applied Math	Chemistry	Dr. Forrest C. Hentz, Jr.	Hydrolytic polymerization of metallic cations
"	"	Dr. George H. Wahl, Jr.	Reactions in liquid bromine; nuclear magnetic resonance investigations of hydrogen bonding
"	Experimental Statistics	Dr. R. J. Hader	Statistical theory and methodology as related to industry and engineering applications
"	"	Mr. H. K. Hamann	Statistical theory and methodology as related to biological applications
"	"	*Dr. Don W. Hayne	Sampling, aquatic biology, pollution biology, and pesticide ecology
"	"	Dr. A. H. E. Grandage	Statistical theory and methodology as related to industry and engineering applications

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Physical Sciences & Applied Math	Experimental Statistics	Dr. H. L. Lucas, Jr.	Mathematical description, mathematical modeling, and experimental design for dynamic systems with biological components
"	"	Dr. A. R. Manson	Model building for spread of pollution, design of experiments for monitoring pollution levels, and related areas
"	"	*Mr. Robert E. Mason	Quantitative ecology, biostatistics, and adaptation of biological problems to the computer
"	"	Dr. David D. Mason (Head of Department)	Design and analysis of experiments and surveys relating to the effect of soil characteristics, topography, and management to the hydrology of an area
"	"	Dr. R. J. Monroe	Statistical consultant in estuarine biology research and to bacteriologists engaged in water pollution studies
"	"	Dr. L. A. Nelson	Design and analysis of experiments and surveys relating to the effect of soil characteristics, topography, and management factors on the hydrology and pesticide retaining characteristics of an area
"	"	Dr. C. H. Proctor	Sample design and analysis to survey recreation activities and resources
"	"	Dr. Charles Quesenberry	Applications of statistical theory and methods to problems of science
"	"	Dr. R. G. D. Steel	Statistical theory and methodology as related to biological applications
"	"	Dr. H. R. van der Vaart	Mathematical models for representing physical and biological processes

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Physical Sciences & Applied Math	Experimental Statistics	Dr. O. Wesler	Mathematical models for representing physical and biological processes
"	Geosciences	*Mr. Albert Hardy (State Climatologist)	Relationships of precipitation, temperature, evaporation, soil moisture, and soil temperature to agricultural and industrial production, human health and welfare
"	"	Dr. Norden E. Huang	Physical oceanography
"	"	*Dr. C. J. Leith	Coastal erosion and sand movement
"	"	*Dr. John M. Parker, III	Occurrence of ground water in metamorphic and igneous rocks
"	"	Dr. Walter J. Saucier	Meteorology; atmospheric water resources and processes
"	"	*Dr. Charles W. Welby	Ground water occurrence and management and legal and economic aspects of ground water use
"	"	Dr. Allen H. Weber	Micrometeorology, boundary layer transport of water vapor, heat, momentum and particulates
Textiles	Textile Chemistry	*Dr. Carl E. Bryan	In-plant control of textile wastes; effect of textile wastes on streams
"	"	Prof. H. A. Rutherford (Head of Department)	Water use and waste control in textile industry

*Either conducting research or awaiting action on research proposals



UNIVERSITY OF NORTH CAROLINA
AT CHAPEL HILL



Consolidated University of North Carolina - University of North Carolina at Chapel Hill

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Botany	*Dr. Max H. Hommersnad	Systematics, morphology, physiology and phyto-geography of marine algae
"	"	*Dr. William J. Koch	Aquatic fungi development, systematics, ecology
"	"	Dr. Helmut Lieth	Water use by terrestrial vegetation
"	"	*Dr. J. Frank McCormick	Estuarine and fresh water ecology, particularly environmental analysis, pollution, and algal studies
"	"	*Mr. Charles F. Rhyne	Marine algae
"	Chemistry	*Dr. Richard P. Buck	Membrane electro chemistry and trace analysis by spark source mass spectrometry
"	"	*Dr. James L. Coke	Organic compounds in aquatic ecosystems
"	"	*Dr. Royce W. Murray	Basic research on adsorption of metal ions and complexes at metal surfaces
"	"	Dr. Charles N. Reilley	Electrochemical determination of dissolved oxygen
"	"	*Dr. Henry C. Thomas	Adsorption and motion of ions on and through soil minerals
"	Geography	*Dr. Arthur J. Hawley	Water's role in technologically advanced agricultural systems
"	"	*Dr. Richard J. Kopeck	Urban climatology
"	Geology	*Dr. Roy L. Ingram	Principles controlling variations in porosity and permeability in modern and ancient sediment; geology of North Carolina Coastal Plain

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Geology	Dr. Ben J. Korgen	Physical oceanography
"	"	*Dr. Paul C. Ragland	Trace and major cations in natural waters
"	"	*Dr. Daniel A. Textoris	Solution of mineral matter, precipitation in sedimentary rocks and influence on permeability and porosity
"	"	Dr. Joel Watkins	Application of reflection and refraction seismology to ground water problems
"	Zoology	*Dr. Charles E. Jenner	Invertebrate zoology and aquatic ecology
"	"	*Dr. Howard T. Odum	Ecological networks, tropical and disturbed systems
"	"	*Dr. Alan E. Stiven (Chairman of Department)	Population processes in aquatic systems, decomposition and detrital food chains in fresh and marine waters
"	"	*Dr. Rupert J. Riedl	Faunistical, anatomical and ecological interests
Graduate	Center for Urban & Regional Studies	*Dr. Raymond J. Burby, III	Multipurpose water use and urban expansion; policy, controls and guidelines for private and public development practices
"	"	*Dr. Thomas G. Donnelly	Adaptive simulation analysis of reservoir development patterns; models of new town development and water use
"	"	*Dr. Edward J. Kaiser	Impact of water and sewerage policies on urban development; residential development utilizing water resources as a part of the environment
"	"	*Professor S. F. Weiss	Water as a key factor in urban and regional land use, misuse, and reuse; environmental quality and control in urban growth; new town development adjacent to man-made and natural bodies of water

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Graduate	City & Regional Planning	*Dr. M. M. Hufschmidt	Water resources planning, policy and administration, and system analysis techniques
"	"	*Mr. Hugh W. Knox	Impact of economic development on water resources
"	"	*Dr. David H. Moreau	Regional water resources planning and management, systems analysis techniques, multi-reservoir system operation, impact of hurricane forecasts on water resource management
"	"	*Dr. Francis H. Parker	Water resources planning, policy and administration, and system analysis techniques
"	Curriculum in Recreation Administration	Dr. H. Douglas Sessoms	Outdoor recreation patterns, relationship of socio-economic characteristics to leisure use, and motivating factors in outdoor recreation participation
"	Political Science	Dr. Deil S. Wright	Decision makers' attitudes and program priorities on various functions of government
Institute of Marine Sciences	-----	*Dr. A. F. Chestnut (Director of Institute)	Marine and estuarine ecology
"		*Dr. William E. Fahy	Ecology of marine and brackish water fishes; experimental study of influence of environmental factors on skeleton of developing marine fishes
"		*Dr. Jan J. Kohlmeyer	Marine fungi
"		*Professor Hugh J. Porter	Marine and estuarine mollusca
"		*Dr. Austin B. Williams	Systematics, zoogeography and ecology of Decapod Crustacea
"		Dr. Frank J. Schwartz	Systematics zoogeography and ecology of fishes and turtles

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Institute of Marine Sciences	- - - - -	*Dr. William J. Woods	Hydrography and plankton of western Pamlico Sound, and productivity-nutrient cycles in Bogue Sound
Institute of Government	- - - - -	*Professor W. A. Campbell	Natural resources law and administration, property tax law and administration, criminal law
"		*Professor M. S. Heath, Jr.	Natural resources law and administration, legislation, and municipal government
"		*Professor W. J. Wicker	Public control and provision of water and sewerage services, with emphasis on governmental organization, management, finance, and intergovernmental relations
Law	- - - - -	*Prof. Thomas Schoenbaum	Water law
Public Health	Environmental Sciences and Engineering	*Prof. James C. Brown	Wastewater treatment and reclamation; water treatment; planning and financing of water resource facilities
"	"	Dr. Richard F. Cole	Sanitary engineering unit processes, water supply and waste disposal, water and waste treatment plant design, swimming pool design, operation and maintenance
"	"	*Dr. J. Donald Johnson	Water chemistry, chlorination, disinfection, fluoridation, flotation tertiary treatment processes, estuarine pollution, and ionic interaction in saline waters
"	"	*Dr. Edward J. Kuenzler	Aquatic ecology, phytoplankton, mangrove swamps, nutrient cycling
"	"	Mr. Donald T. Lauria (On assignment in Guatamala)	Application of systems analysis techniques to water supply planning in developing countries

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Public Health	Environmental Sciences and Engineering	*Dr. James C. Lamb, III	Water and waste treatment processes, stream pollution, and water resources economics
"	"	*Dr. John Lyman (Sea Grant Coordinator)	Chemical oceanography
"	"	*Dr. Robert A. Mah	Microbiology of anerobic sludge fermentation; aquatic bacteriology of estuarine ponds
"	"	*Prof. F. E. McJunkin	Water supply and pollution control
"	"	*Dr. Daniel A. Okun (Head of Department)	Water supply and pollution control for developing countries
"	"	*Dr. Charles R. O'Melia	Water chemistry, chemical aspects of water and wastewater treatment processes and natural systems
"	"	*Dr. Jabbar K. Sherwani	Systems analysis approach to water resources, hydrology, and economics of water quality management
"	"	*Dr. James T. Staley	Aquatic bacteria; microbial ecology
"	"	Dr. S. J. Weidenkopf	Inactivation of viruses in water
"	"	*Dr. Charles M. Weiss	Aquatic ecology, effects of pollution on the aquatic environment, water resources and water
"	Biostatistics	Dr. Elizabeth J. Coulter	Demography, economic factors in health, studies of environment in relation to long-term illness, health planning
"	"	Dr. R. C. Elston	Statistical methods in bioassay
"	"	Dr. James E. Grizzle	Consultation with research workers on design of experiments and analysis of data

*Either conducting research or awaiting action on research proposals



UNIVERSITY OF NORTH CAROLINA
AT CHARLOTTE



Consolidated University of North Carolina - University of North Carolina at Charlotte

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
- - - - -	Biology	*Dr. Edward F. Menhinick	Effect of heated effluents, pollution and radioactive wastes on plants and animals
	Engineering	Dr. Jack B. Evett	Water resources planning and development; computer applications to water resources problems
	Geography	Dr. James W. Clay	Water resource use

*Either conducting research or awaiting action on research proposals

UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO



Consolidated University of North Carolina - University of North Carolina at Greensboro

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
- - - - -	Chemistry	*Dr. Henry L. Anderson, II	Thermodynamics of salt solutions
	"	*Dr. John R. Jezorek	The effect of nonaqueous aprotic solvents on the structure of water

*Either conducting research or awaiting action on research proposals



CAMPBELL COLLEGE



Campbell College

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
- - - - -	Geology	*Professor R. H. Martin	Ground water pollution; ground water supplies as related to terrace gravels
	"	*Dr. Robert L. Perkins	Ground water pollution; ground water supplies as related to terrace gravels

*Either conducting research or awaiting action on research proposals



DUKE UNIVERSITY



Duke University

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Graduate School of Arts and Sciences	Botany	*Dr. T. W. Johnson, Jr.	Aquatic fungi: Marine, estuarine, and fresh water
"	"	*Dr. Paul J. Kramer	Effects of water stress on plant growth and plant processes
"	"	*Dr. Richard B. Searles	Biology of benthic marine algae
"	Physiology & Pharmacology	Dr. D. C. Tosteson (Chairman of Department)	Lipid and energy metabolism during osmoregulation process
"	Political Science	Dr. Richard H. Leach	Intergovernmental relations in water development, regulation and use
"	Geology - Marine Lab	*Dr. Orrin H. Pilkey	Continental margin marine geology studies
"	Pathology - Marine Lab	Dr. F. L. Ginn	Subcellular reaction to injury in the kidney
"	"	Dr. Benjamin Trump	Subcellular reaction to injury in the kidney
"	Physiology & Pharmacology - Marine Lab	Dr. John Gutknecht	Ionic and osmotic regulation in crustaceans
"	"	Dr. Joanne Whitney	Lipid and energy metabolism during osmoregulation process
"	"	Dr. Michelle Gilles	Lipid and energy metabolism during osmoregulation process
"	"	Dr. Raymond Gilles	Lipid and energy metabolism during osmoregulation process
"	"	Dr. Ernest Schoffeniels	Lipid and energy metabolism during osmoregulation process

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Graduate School of Arts and Sciences	Zoology & Botany - Marine Laboratory	*Dr. Richard Barber (Director, Oceanographic Program)	Biogeochemical cycling of metals and organic matter and phytoplankton ecology
"	"	*Dr. C. G. Bookhout	Rearing estuarine and oceanic invertebrates in relation to environmental factors and planktonic studies of estuarine and oceanic crustacea
"	"	*Dr. John D. Costlow, Jr. (Director, Marine Lab)	Environmental effects on crustacean develop- ment and endocrine mechanisms of crustacean development
"	"	*Dr. Bruce C. Coull	Meiobenthic ecology, zooplankton
"	"	*Dr. Susan Huntsman	Phytoplankton physiology, carbohydrate metabo- lism in crustacea
"	"	*Mr. John D. Newton	Construct an expanded Atlas summarizing a wide variety of oceanographic information based principally on results obtained by R/V EASTWARD during investigations made on the North Carolina Continental Margin
"	"	*Dr. Unnsteinn Stefansson	Chemical oceanography - particularly nutrients and water masses analysis
"	"	Dr. John Sutherland	Dispersal, speciation, and acclimation in predatory marine gastropods
"	"	*Dr. Richard Zingmark	Phycology--Phytoplankton--Dinoflagellates (Cytology, reproduction, life-histories, taxonomy, systematics)
Forestry	- - - - -	*Dr. Kenneth R. Knoerr	Experimental evaluation and computer simula- tion of the energy and water balance processes of natural and managed forest ecosystems

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Forestry	- - - - -	*Dr. Charles W. Ralston	Effects of forest land use practices on water quality and nutrient cycling of forested watersheds
Law	- - - - -	Dr. Melvin G. Shimm	Natural resources law

*Either conducting research or awaiting action on research proposals



EAST CAROLINA UNIVERSITY



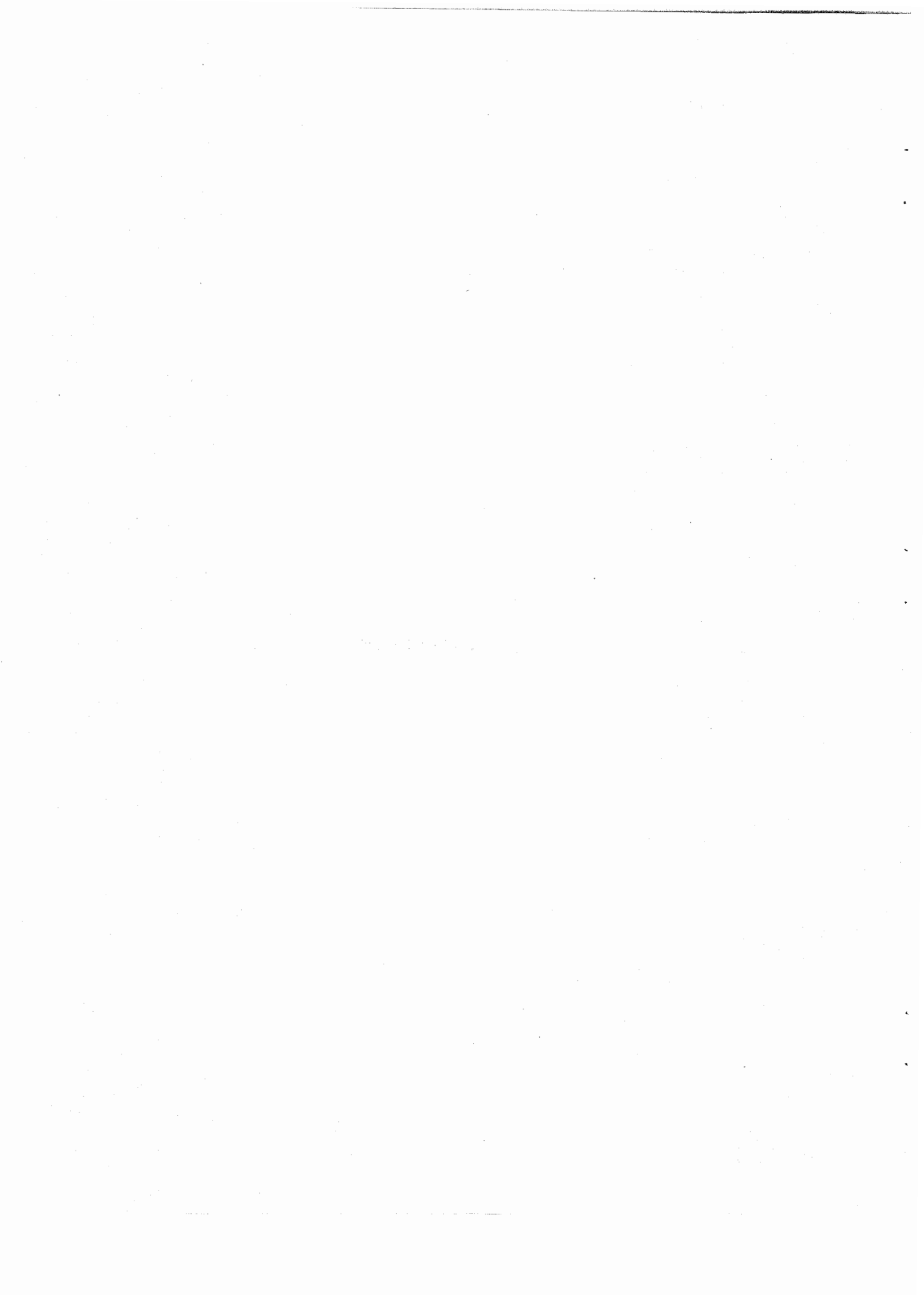
East Carolina University

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Biology	*Mr. Francis P. Belcik	Parasitic estuarine, and marine copepods, especially on invertebrates; coastal vegetation
"	"	*Dr. Vincent J. Bellis	Algal ecology and algae as indicators of water quality
"	"	*Dr. J. G. Boyette	Ecology and natural history of native vertebrates including aquatic and marine forms
"	"	*Dr. Graham J. Davis	Growth and reproduction in aquatic seed plants
"	"	*Dr. Takeru Ito	Analysis of pesticides in natural water; metabolism of pesticides by soil micro-organism; and biochemistry of Thiobacillus ferrooxidans
"	"	*Dr. John S. Laurie	Parasitism in marine and other aquatic organisms
"	"	*Dr. James S. McDaniel	Digenetic trematode parasites of molluska
"	"	Dr. Susan J. McDaniel	Limnology
"	"	*Dr. Edward P. Ryan	Crustacean biology
"	Geology	Dr. C. Q. Brown	Sediment transport and geochemistry
"	"	*Dr. A. Ray Jennings	Ground water hydrology
"	"	Dr. Jean Lowry	Ground water
"	"	*Dr. Michael P. O'Connor	Marine and estuarine geology
"	"	*Dr. S. R. Riggs	Ground water as related to stratigraphic variables

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Geography	Dr. H. Daniel Stillwell	Recreation use of water resources and biogeography

*Either conducting research or awaiting action on research proposals

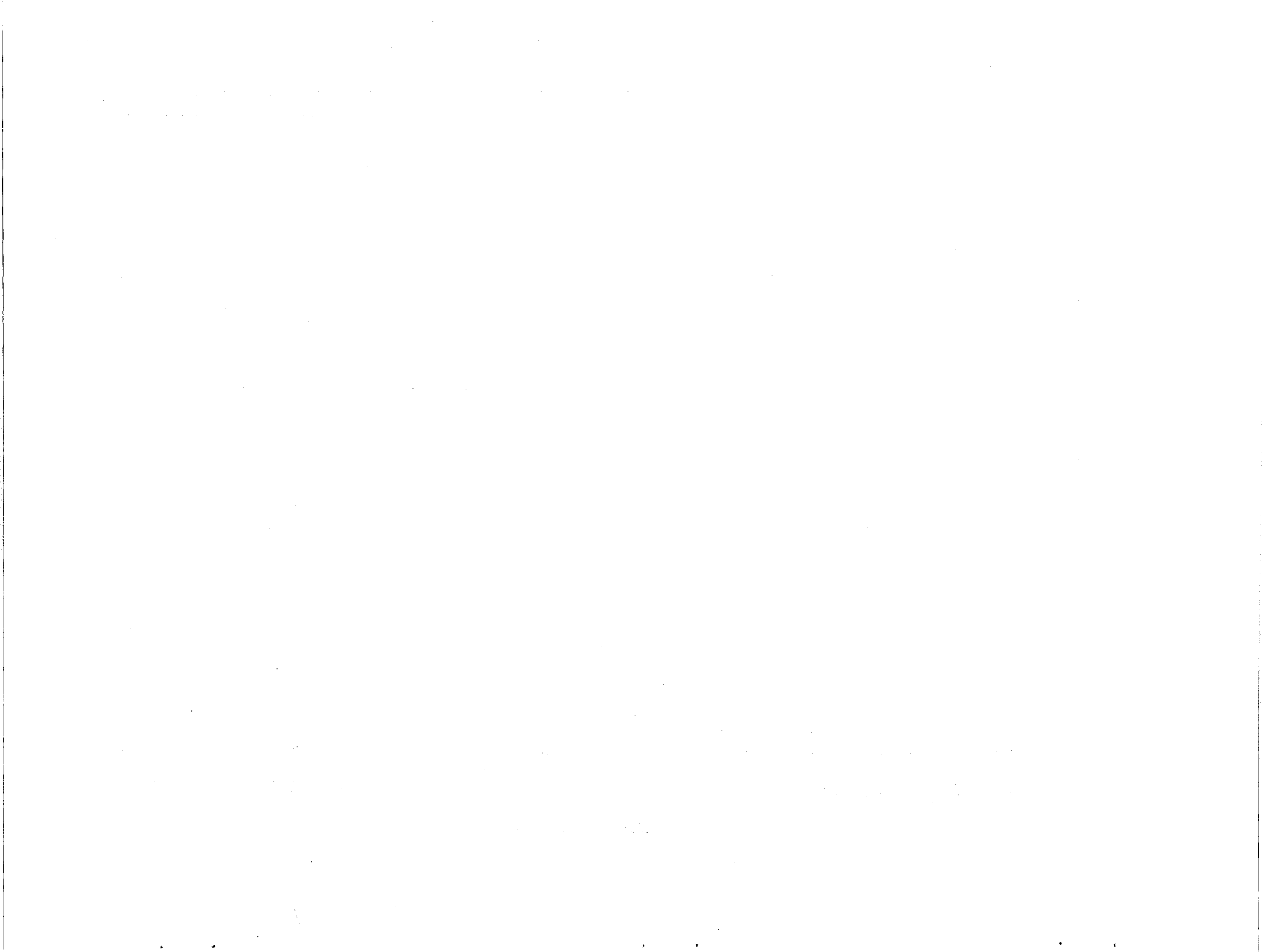
GUILFORD COLLEGE



Guilford College

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
- - - - -	Biology	*Dr. Robert R. Bryden	Taxonomy of the hydras using limnological method

*Either conducting research or awaiting action on research proposals

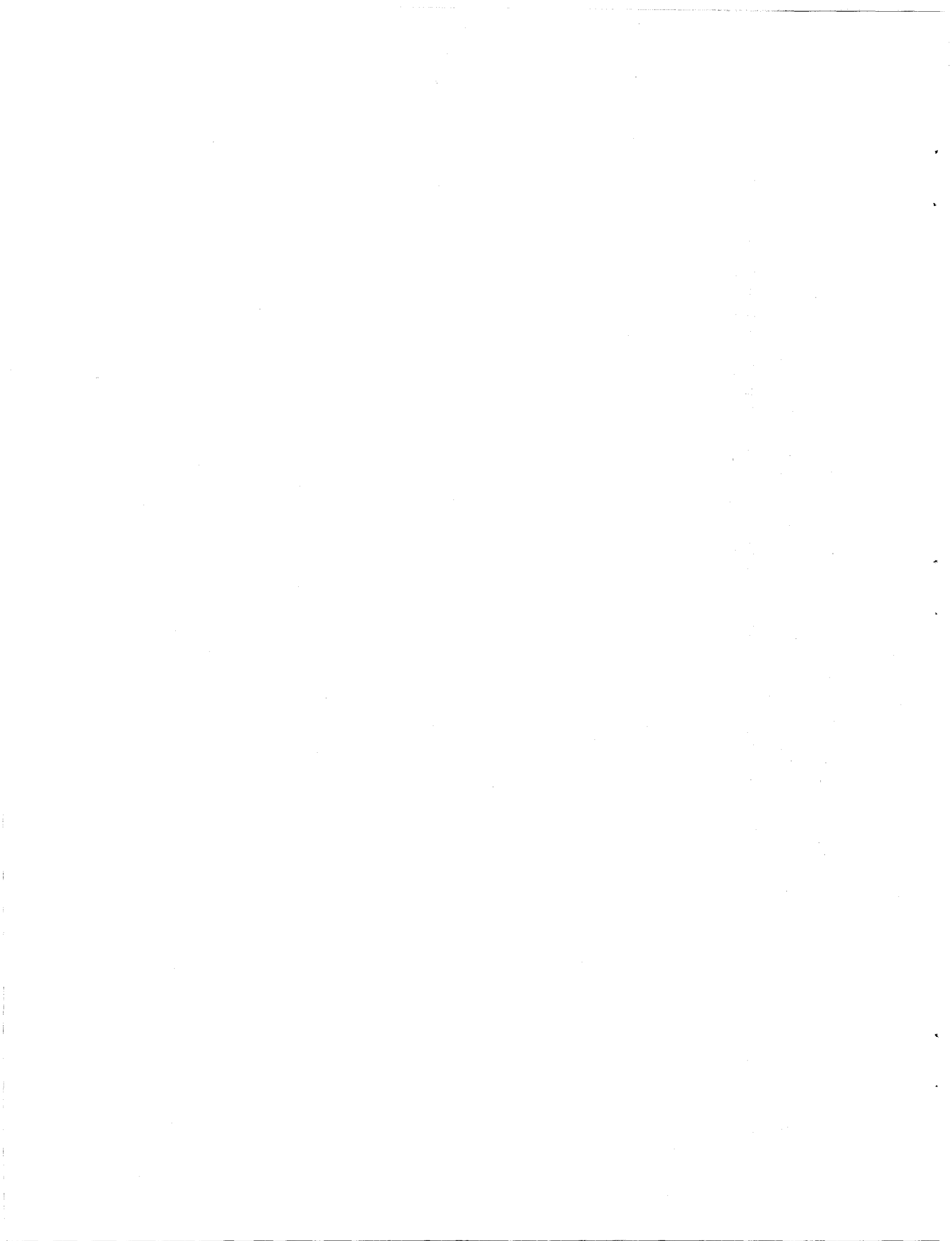


NORTH CAROLINA CENTRAL UNIVERSITY
AT DURHAM

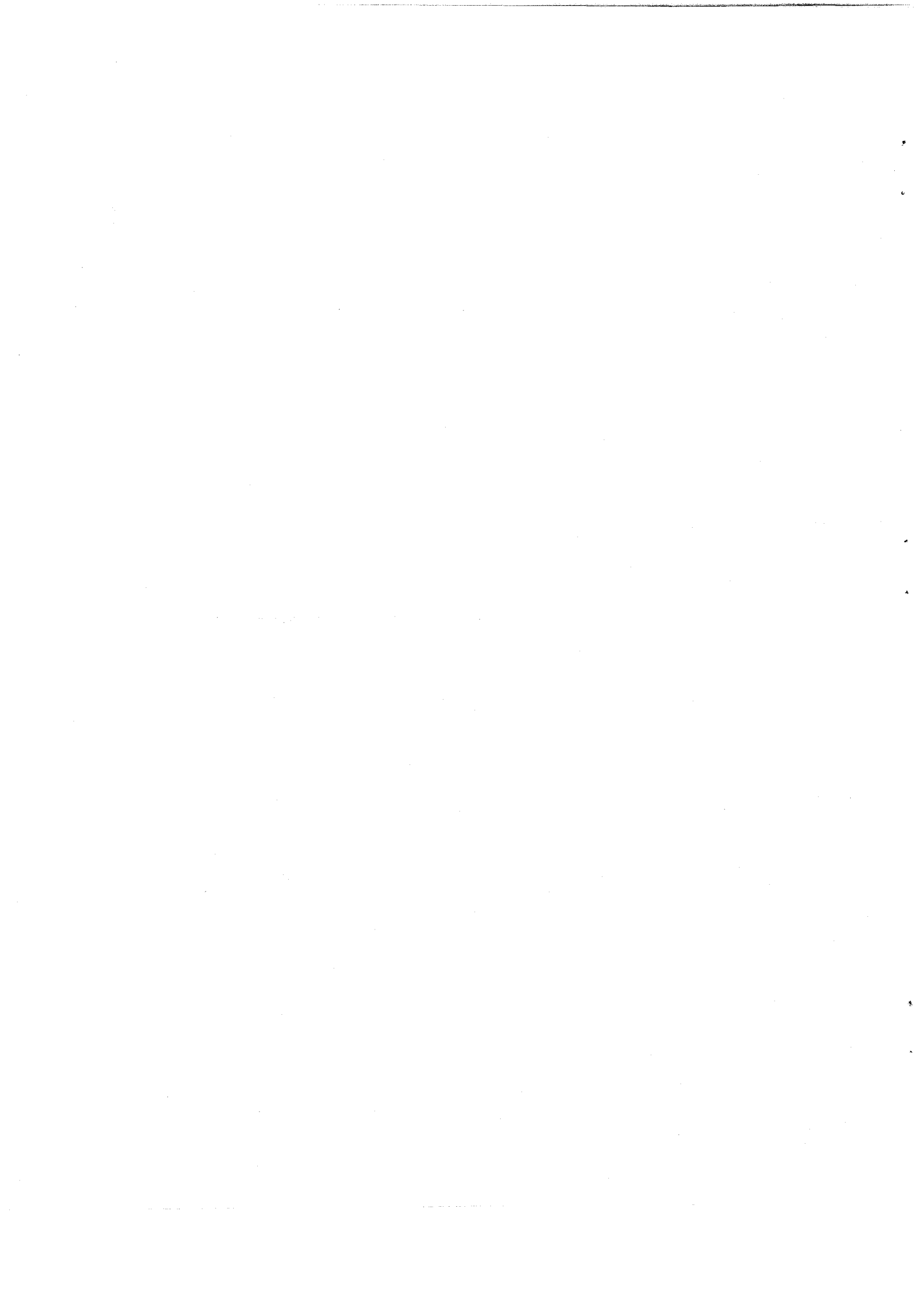


North Carolina Central University at Durham

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Biology	Professor Nell Hirschberg	Isolation of leptospira in pond waters and effect of pesticides on bacteria



WESTERN CAROLINA UNIVERSITY



Western Carolina University

<u>School</u>	<u>Department</u>	<u>Name</u>	<u>Water Related Research Interest</u>
Arts & Sciences	Chemistry	Dr. Hubert L. Youmans	Organic pollution in mountain waters

