

## **NCDENR Environmental Education Resources For Classroom Teachers and Students**

Prepared by the NC Office of Environmental Education

The North Carolina Department of Environment and Natural Resources (DENR) provides many environmental education resources for the state's K-12 teachers. These resources come in the form of professional development experiences, student field experiences, school outreach programs, and support materials. The following document describes all of the resources provided by DENR that are aimed at helping K-12 classroom teachers incorporate environmental education into their curricula. Numbers of participant reached by each division are for fiscal year 2004-05.

### **Summary**

The Department of Environment and Natural resources provides an invaluable service to North Carolina's teachers and students. In the 2004-05 fiscal year alone, **5,317 teachers** and **338,184 students** participated in DENR programs. Over **546,500 individuals** (546,672) made use of DENR environmental education resources. DENR divisions aid the Department of Public Instruction through this service, by providing programs and materials that are aligned with the NC Standard Course of Study.

The Environmental Education Certification Program, managed by the Office of Environmental Education, promotes all of the environmental education programs in DENR by encouraging enrollees to attend workshops and giving them credit towards their certification. Many divisions within DENR in turn support the Office of Environmental Education and educators by providing the workshops that are required for certification. This reciprocal relationship between DENR's education programs and the Environmental Education Certification Program helps promote environmental education in NC and sets a standard for achievement in environmental education for both formal and non-formal educators.

### **Professional Development Opportunities**

DENR professional development programs reached over 5,300 educators in fiscal year 2004-05. These educators have the potential to reach more than 121,000 students in one year alone. Professional development programs include workshops, certificate programs, institutes, and resource facilities aimed at training K-12 educators in the field of environmental education. This category includes the Environmental Education Certification Program mentioned earlier. There are currently 730 educators certified in the Environmental Education Certification Program, all of whom have participated in DENR professional development workshops to complete their certification requirements.

<b>Division*</b>	<b>DENR Professional Development Programs</b>	<b>Number of Participating Educators</b>
Aquariums	4	42
Coastal Management <sup>†</sup>	10	223
Environmental Education	2	741
Forest Resources <sup>†</sup>	12	359
Land Resources	3	103
Museum of Natural Sciences <sup>†</sup>	44	851
Parks and Recreation <sup>†</sup>	99	1,153
Soil & Water Conservation <sup>†</sup>	7	146
Water Resources <sup>†</sup>	16	192
Wildlife Resources Commission <sup>†</sup>	99	1,978
Zoo	20	269
<b>GRAND TOTAL</b>	<b>795</b>	<b>5,317</b>

\* - Note: Any division not listed did not report for this category.

† - Indicates that a division sponsors workshops that are approved as a Criteria I workshop in the NC Environmental Education Certification Programs. A minimum of seven 10-hour Criteria I workshops are required as part of certification.

### **Environmental Education Programs for K-12 Students**

Environmental education programs for K-12 students includes field trips and site visits where students travel to environmental education centers, parks, museums, etc. for programs provided by DENR staff, outreach programs where DENR staff travel from their work site to provide programs for school-age participants, as well as distance learning opportunities where a DENR staff person interacts with a school class via the Internet or the North Carolina Information Highway. These programs include instructional activities and competitions for students administered by representatives from the various divisions within the Department of Environment and Natural Resources.

<b>School-Age Participants in DENR EE Programs*</b>	
Aquariums	102,279
Coastal Management	5,254
Forest Resources	77,779
Land Resources	1,925
Marine Fisheries	648
Museum of Natural Sciences	23,947
Parks and Recreation	100,737
Pollution Prevention & Environmental Assistance	43
Soil & Water Conservation	2,142
Water Resources	621
Wildlife Resources	16,539
Zoo	6,270
<b>TOTAL</b>	<b>338,184</b>

\* - Note: Any division not listed did not report for this category.

## Environmental Education Resources

DENR Divisions distributed almost 550,000 environmental education resources to individuals throughout NC in the 2004-05 fiscal year, including K-12 teachers and students. These resources include any support materials that can be used to facilitate hands-on learning in the classroom. Videos, web sites, curriculum and activity guides, brochures, posters, contests, magazines, and grants are all examples of environmental education resources made available to K-12 educators in North Carolina by DENR divisions.

<b>Total EE Resources Distributed*</b>	
Aquariums	4,500
Environmental Education	220,911
Forest Resources	80,000
Land Resources	1,810
Marine Fisheries	100,000
Museum of Natural Sciences	63,140
Parks and Recreation	8,071
Pollution Prevention & Environmental Assistance	783
Water Resources	350
Wildlife Resources	65,000
Zoo	2,107
<b>GRAND TOTAL</b>	<b>546,672</b>

\* - Note: Any division not listed did not report for this category.

## Further Information

For more information about the specific educational programs and resources offered by each DENR Division, please visit [www.eenorthcarolina.org](http://www.eenorthcarolina.org), click on “**Resources**,” then “**Find an Organization**” and search for the Division name. The full report “Measuring Environmental Education in North Carolina: A Quantitative Survey, 2004-2005 Results” contains detailed information on the type of programs offered to North Carolina citizens by county, and is available by request from the NC Office of Environmental Education.

## Current Need

The Department provides a vast quantity of supplemental training, professional development opportunities, and resources for K-12 teachers across all disciplines and grade levels. DENR educators are the leaders for environmental education in the state. They serve an invaluable role in assisting the Department of Public Instruction, other agencies, teachers, and non-formal educators.

North Carolina is also a national leader in environmental education. Our state has one of the largest numbers of formal and non-formal environmental educators and touts over 190 facilities designated as Environmental Education Centers. These Centers provide environmental education programs and experiences for millions of citizens each year.

As evidence of the momentum toward quality environmental education in North Carolina, several Universities are exploring the possibility of offering a Master’s program in environmental education, and several already offer undergraduate degrees in the field. DENR could further support this effort by establishing environmental education positions in Divisions that do not have environmental educators with degrees in the field. Although the department has its own environmental education

programs, it does not provide positions specifically for employees with degrees in the field of environmental education. The presence of professional environmental educators in the department would support and provide credibility to the work that has been done to place North Carolina as a leader in the field of environmental education. Providing positions designated for environmental education in DENR Divisions would further enhance the reciprocal relationship between DENR educators and the certification program, as well as solidify North Carolina's place as a leader in the field.