

Agency Retirements and Enrollment Declines Create Shortage of Natural Resource Professionals

By Larry Mason

For anyone interested in a career in forestry, now might be the time. Reports from the Renewable Natural Resources Foundation and the National Association of Professional Forestry Schools and Colleges warn of a growing shortage of qualified natural resource professionals needed to fill positions vacated by retiring baby boomers. The magnitude of jobs becoming available may be very large. The Department of Interior and the Forest Service employ more than 90,000 people and about one-half of them are expected to retire by 2007. Reports from other federal and state agencies confirm a similar pending labor need. Compounding the problem, national undergraduate enrollment in natural resource science programs has declined since 1995 by 40%.



Agency leaders cite an increasing disconnect between society, particularly young people, and natural resources. A decade of environmental controversy has left many students uncertain about the future of natural resource careers. Where will the professional workforce be found to carry out the sustainable management of the nation's forests? What will be the future of natural resource science colleges if low enrollment trends continue? Aggressive approaches to college recruitments are clearly needed that better identify student candidates, capture their attention, and assure potential students with sufficient desire and aptitude that access to higher education will be made available.

Reductions in the harvests of public forests over the last two decades have resulted in dramatic changes to the economies of Washington's rural timber-dependent communities. In 2002, the Washington Employment Security Department reported the widest urban-to-rural income disparity in 30 years. Many of the state's rural counties have unemployment rates over 10%. In response to these economic shifts, State and Federal programs, such as Running Start and Displaced Workforce Training, have been created to provide tuition assistance packages for rural residents to attend Washington State's 34 Community and Technical Colleges.

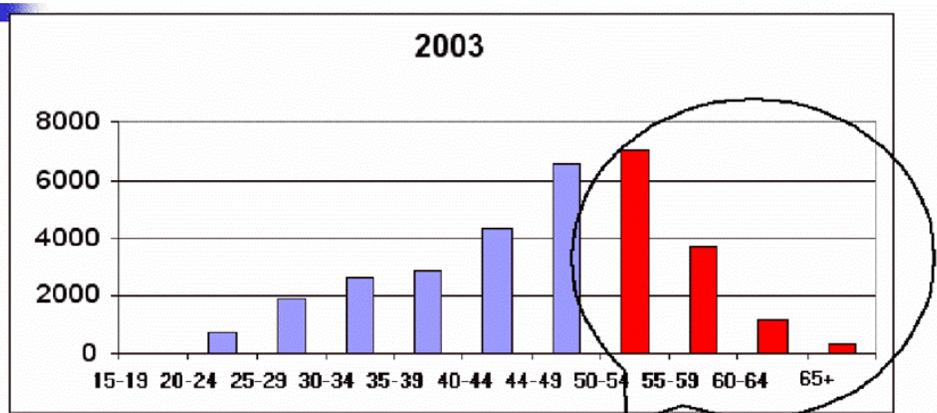


Figure 1. USDA Forest Service Employment vs. Age: 75% of GS15, 64% of GS14, and 57% of GS13 are over 50 years old. Source: John Kusano, Assistant Director of Human Resources Management, USDA Forest Service.

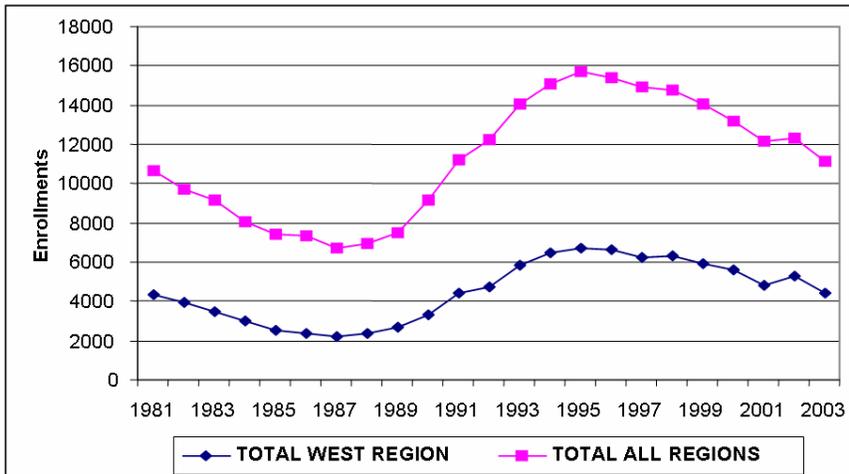


Figure 2. Undergraduate Enrollment in Natural Resources for the West and the Nation. Source: T.L. Sharik and K. Earley, Department of Environment and Society, College of Natural Resources, Utah State University.

Rural students have always faced formidable obstacles to their pursuit of higher education. Many students must deal with such barriers as poor academic performance in high school, limited English-language skills, and financial hardships. Others are place- or situation-bound people with jobs, homes, and family obligations. A growing percentage of rural students are making mid-career adjustments. Community colleges are playing a critical role in providing affordable local opportunities for high quality education. Seventeen times as many undergraduate students from

rural timber-dependent communities are enrolled in community colleges as compared to the University of Washington. While enrollments with majors in natural resource sciences have been declining at four-year colleges and universities, surprisingly a number of community colleges are finding high demand. The response has been creation and expansion of community college resource science programs.

The Washington Board for Community and Technical Colleges has shown that 65% of all undergraduates in the State are enrolled in community and technical colleges. If more seamless higher education partnerships could be established between community colleges and university natural resource programs, then increases in transfer enrollments should result. Individuals, communities, colleges, universities, resource management organizations, and the broader society would all benefit.

Opportunities for synergism have not gone unnoticed. Community colleges are joining with public universities to develop “two plus two” programs where community college curriculums are designed for perfect fit such that transfer students bring two full years of required credit and are assured swift completion of a four-year degree. In some cases, courses will be taught for university credit on community college campuses or through distance learning offered over the internet. There is also discussion that community colleges could possibly get accreditation to offer limited bachelor’s degrees.

Stewardship of America’s forests for a future that insures sustainable ecosystems and reliable flows of products will require educated professionals capable of addressing complex resource management challenges. Rural residents with historic ties to the land and resource industries are likely candidates if opportunities for higher education can be expanded. A strong public commitment to innovative educational deliveries that create greater flexibilities and broader access at less cost will increase student enrollments in natural resource science programs.

References:

Renewable Natural Resources Foundation (2003-4). *Federal natural resource agencies confront an aging workforce and challenges to their future roles*. Renewable Resources Journal. 2 (14). www.rnrf.org

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