# WORKSHOP ON THE FUTURE OF FORESTRY EDUCATION

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# Forestry Education at UW-S

- 1935 BSF degree in forest management
- Dramatic transformation in 2003
  - Low enrollments in forest management, wild land conservation, wildlife science, environmental horticulture, paper science and engineering, forest engineering, and sustainable resource science
  - Reduced budgets, loss of faculty positions, loss of space, and a threat to eliminate, reduce or consolidate existing programs with other university units

# Forestry Education at UW-S

- Faculty elected to retain paper science and engineering curriculum without major changes (restructured as Bioresource Science and Engineering)
- Consolidated the six undergraduate curricula into a new major - Environmental Science and Resource Management (ESRM)
- ESRM a broad introduction to natural resource management and environmental science

# Design of ESRM Curriculum

- First two years devoted to general education
- Courses in School that focus on ecological, social and economic aspects of sustainability
- 30 or more free electives
- 35 credits of restricted electives in one of four degree options

landscape ecology and conservation restoration ecology and environmental horticulture

wildlife conservation

sustainable forest management (SFM)

# **Enrollment Trends**

**UW SFR Autumn Enrollment Data** 



### Master's Degree Rationale

- Student demand for the SFM option was low
- Free and restricted elective courses -- could not guarantee that all students would fulfill SAF's accreditation requirements in their four required subject areas
- To retain maximum degree of flexibility, students not required to elect an option
- Principle reason wished to begin offering our first professional forestry degree at the graduate level

#### UW's MFR in Forest Management

- Professional Master of Forest Resources in Forest Management was accredited by SAF in 2006
- Closely integrated with the SFM option of the ESRM undergraduate curriculum -- qualified students may receive both degrees in five years

### Master's Degree Rationale

- UW-S is a non-land grant research university located in a large urban area with a well-educated and environmentally conscious population
- Washington State retains a robust forest products industry across rural areas
- Increasing complexity of natural resource management issues as a result of increasing human populations and a shrinking forest land base
- Changing demands of society for sustainable forest practices and products

#### **Professional Graduate Education**

Other disciplines promote professional graduate education

- Business
- Law
- Engineering
- Medical

### Professional Graduate Forestry Education

- Eight universities offer an SAF-accredited professional master's degree;
- Five have <u>both</u> accredited BS and master's degree programs (Auburn, Maine, Michigan Tech, SUNY -Syracuse, and OSU)
- Two have accredited master's-<u>only</u> degree programs (Yale and Duke)
- One (UW-S) has an accredited master's degree <u>and</u> a non-accredited forestry BS degree program
- In addition, some schools offer non-accredited professional master's degree programs

# **Historical Lineage**

- Dana and Johnson (1963) cite the 1911 and 1920 conferences on forestry education where the idea of a five-year program was discussed
  Graves and Guise (1932) concluded that five years was desirable for a full professional education
- David Mason (1937) stated that, it is agreed that a minimum of five years of collegiate work is required

## **Historical Lineage**

 Hosmer (1938) stated that the Society should undertake the serious consideration of a shift in forestry curricula to a five-year program
 H.H. Chapman (1942) concluded that the advantage of a fifth year to the student for specialization in any line, based on sound professional instruction, is obvious

#### **Recent Commentary**

- Foil (1978) and Tombaugh (1998) place the evolution of forestry education within the context of the changing university environment as well as broader changes taking place within society
- Duncan, Skok and Richards (1989) observe that current curriculum demands might require a fiveyear professional program
- Bentley, Larson and Ashton (1991) conclude that this stage of education will be most able to accommodate the predicted roles of the professional resource manager

#### **Recent Commentary**

Sample et al. (2000) conclude by that many of the skills employers consider important, particularly management and problem-solving skills, should be gained through graduate education or continuing education

### Conclusions

Over time the profession will place increased value on professional graduate education Future success depends on the advocacy of the SAF, university faculties, and employers Hopefully, society will recognize the importance of our forests for a sustainable society and properly rewards future forest land managers who pursue a graduate education