## NAUFRP Education Chair Interim Report Terry L. Sharik March 5, 2018

- 1. Am exploring the possibility of NAUFRP becoming a "Professional Partner" of IFSA along with IUFRO, the European Forest Institute (EFI), Commonwealth Forestry Association (CFA), International Partnership for Forestry Education (IPFE), Food and Agriculture Organization (FAO), Center for International Research (CIFOR), Silva Network, and International Tropical Timber Organization (ITTO). Recently met with the leadership of the North American Region of IFSA to solicit their assistance (3-D).
- 2. Developed a survey to be administered to students attending the 2014 IUFRO World Congress and SAF Annual Convention regarding their perspectives on enrolling in undergraduate forestry programs in the U.S. and elsewhere. Overall response rate was 53% (n=526). This was a follow-up to our U.S. surveys conducted in 2004, 2007, and 2010. The data from both venues have been analyzed and that from the SAF National Convention was recently published in the *Journal of Natural Sciences Education*. The findings from the IUFRO survey were presented at the ISSRM in Houghton, MI, on June 25, 2016, and at the IUFRO Regional Congress for Asia and Oceana on October 26, 2016. They were also presented at the SAF National Convention in Madison, WI, on November 5, 2016, and will be submitted for publication in *Society and Natural Resources*. We also administered the survey to all NAUFRP institutions encompassing all areas of natural resources (and including graduate students) as a way of broadening the scope of the survey and reducing the bias in the sample population. The resulting data, from over three-thousand respondents, have been analyzed and we are now in the manuscript preparation phase for submission to the *Journal of Forestry*. Preliminary results were presented at the SAF National Convention in Albuquerque in November, 2018, with an emphasis on diversity (1-D-1-a)
- 3. Conducted an analyses of NAUFRP-member institutions to determine if there is any relationship between the proportion of women and minorities in the natural resources student body and the content of their respective web sites. The results of the study were presented at the SAF National Convention on November 4, 2016, in a special session on diversity and inclusion, and will be submitted for publication in the *Journal of Forestry*. (1-B, 1-D)
- 4. Served on an ad hoc steering committee organized by Susan Stout (USFS) and Carol Redelsheimer (SAF) to organize a special session on diversity and inclusion at the SAF National Convention in Madison, WI, on November 4, 2016. The committee also arranged for oral histories of several people to be recorded on this topic at the convention and recommended that a new SAF Working Group on Diversity and Inclusion be formed. Twenty-five of these oral histories are now available on-line at the University of Wisconsin's Minds@UW website (https://minds.wisconsin.edu/handle/1793/45033). The proposed Working Group on Diversity and Inclusion was approved by the SAF leadership and elected officers at the SAF National Convention in Albuquerque in November, 2018 (1-D, 4-A-2)
- 5. The development of an Educational Clearinghouse on the NAUFRP website is now possible with the fundamental changes having been made to the NAUFRP web site recently. Two documents ready for posting include a list of references on NR student enrollments and diversity, and a summary of "Best Practices for Improving Communication Skills in Natural Resource Majors." (3-C)
- 6. Visited the new USDA FAEIS administrators at Virginia Tech to cooperate on data management related to NAUFRP natural resource academic programs at NAUFRP institutions, and in particular on student

enrollments and faculty demographics. Arranged for these administrators to present at the NAUFRP Executive Committee Meeting and General Assembly in Madison, WI, on November 1 and 2, 2016, respectively. Since then, FAEIS has been gathering data from our member institutions for the years 2013-2016 (with mixed success), confirming the lead contacts for each university, and recording the degree programs for each institution for cross-walking with our joint CIP code classification into Natural Resource and Conservation "academic areas." With participation rates remaining relatively low compared to 2012, we are in the process of making another push to increase them. As of this meeting, 42 institutions have submitted complete undergraduate enrollment data for 2005-2016 and 52 institutions for 2016 only. The latter value for 2012 was 67 institutions. Since 2012 undergraduate enrollments for women and minorities have increased slightly. Graduate enrollment numbers have been complied for the first time over these same time periods, and show similar percentages of women and minorities, and increases over time as those at the undergraduate level. (1-B-3)

- 7. Served on the Advisory Committee for the Global Outlook on Forestry Education (GOFE) Project, jointly sponsored by IUFRO and IFSA. We developed a survey tool to be administered to recent graduates utilizing a Behavior Event Interview (BEI) process to obtain a deeper understanding of the competencies of these graduates in relation to curricula and in the workplace in forestry and natural resources. The survey was administered to 231 practicing professionals from nine countries on five major continents. NAUFRP participating institutions included Michigan Tech (n=16) and the University of Georgia (n=1). The final report was produced on 9-15-2017 and the results summarized in the technical session on Forestry Education at the IUFRO 125<sup>th</sup> Anniversary Congress in Freiburg, Germany on 9-20-2017. A manuscript is being prepared for publication, most likely to be submitted to the *Journal of Forestry*. Funding is being sought to conduct a more comprehensive study. (2-A-3, 3-D, 4-A)
- 8. Attended a meeting at the IUFRO 125<sup>th</sup> Anniversary Congress of the Asia-Pacific Coalition of Universities offering Forestry degree programs, and was the only representative from the U.S. Need to put the International chair for NAUFRP on contact with this group. Have been invited to chair a session and give presentations at the 5<sup>th</sup> Asia-Pacific Forestry Education Conference in Beijing, China, on March 27-28, 2018 (3-D).
- 9. Contributed a chapter on Education to a special report of the U.S. Forest Service on *Drivers of Change in U.S. Forests and the Forest Sector.* Relied heavily on the *Science, Education and Outreach Roadmap for Natural Resources* (APLU 2014) and the 2015 special issue of the Journal of Forestry (Vol. 113, No. 6) on forest science education. Preparation of the report by the lead authors is still in progress. (2-A)

\*Numbers and letters in parentheses refer to specific sections in the *NAUFRP Undergraduate Education Strategy* Report (Layton et al. 2011), where the first order is a goal, the second order an objective within a goal, the third order a task within an objective, and the fourth order a task within a task.