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Cover Photo:

Steve Cinnamon and Kent Turner collect aquatic insects with a Surber sampler in the course of water quality training in June at Colorado State University. See page 5.

Water Resources Training Course Held at Colorado State University

By Juliette Wilson

Resource management specialists from NPS units across the nation participated in a five-day water quality training course held June 24 - 28 at Colorado State University in Fort Collins. Course topics included basic principles of hydrology, chemical analytical techniques, common water quality impacts, waterborne pathogens, use of biological indicators, acid rain, water rights, water quality legislation, and the development of water monitoring and management plans. Presentations were given by researchers, technical specialists, and administrators from Colorado State University as well as from NPS. One full day was devoted to field work in which trainees learned how to use different types of field equipment and collect water and aquatic insect samples. The following day was spent in the laboratory analyzing the previous day's samples for bacteria, chlorides, nitrates, and insect species and comparing results between sites.

A new feature of this year's course was a simulation exercise. Participants were divided into small working groups whose task was to develop a water quality monitoring plan for an imaginary park unit experiencing impacts from a variety of human activities. Monitoring plans were presented to a panel of water quality specialists, who compared and critiqued the different plans. In this way the trainees were able to experience some of the dynamics of planning and implementing such a plan, in addition to receiving immediate feedback on each plan's relative strengths and weaknesses.

Sam Kunkle and Mark Flora of the NPS Water Resources Division (WRD) at Colorado State University (CSU) designed the course and recruited the training staff. Coordination of the course was jointly provided by Ann Baugh, Horace M. Albright Training Center; Glenn Haas, Professor of Recreation Resources at CSU; and Juliette Wilson, WRD/CSU support staff.



Trainees transfer aquatic insect samples to trays for sorting and examination. From left, Bruce Bessken, Hank Snyder, Mike Bilecki (peeking through), Dennis Ditmanson, and Jim Walters.



Dissecting microscopes aid Trainees Mel Poole (left) and Steve Cinnamon examine aquatic insects.



A group of trainees learn how to measure stream flow. From left, Hank Snyder, Jim Walters (in stream), Dennis Ditmanson, Bruce Bessken, Fred Armstrong, Michael Rikard, Gary Smillie (instructor), Rick Ingliss (instructor) and Mike Bilecki.