HPWREN Connectivity at the California Wolf Center

Education

- Bi-directional interactive video and audio provide a unique learning experience and an opportunity for students to interact in real time with California Wolf Center educators; used in elementary, middle, and high schools, colleges and universities, libraries, museums, etc.
- Internship program includes the opportunity to incorporate HPWREN technology into an intern's coursework or research
- Developing distance learning programs has helped determine the limitations and the capabilities of the equipment; this will lead to more efficient use of existing technology and perhaps new technology in the future

Public Access

- Still photos and video from HPWREN cameras are available on the California Wolf Center website for the benefit of members and the public at large
- Allows people to view wolves when they are undisturbed by human presence; key to understanding wolves as they behave in nature because the presence of humans affects every aspect of wolf behavior
- Provides access to the Center to those who otherwise might not be able to benefit from our educational programs due to our remote location

- HPWREN equipment has been used to monitor the health of ailing animals, the development of young pups, and changes in wolf pack hierarchy as pups mature into adults
- The HPWREN camera allows such veterinary and behavioral monitoring to go on without disturbing the wolves, without possibly influencing their behavior, and without risking delay in an ailing or injured wolf's recovery
- In the future, additional cameras could be used to monitor the birth of pups in a den without putting stress on the animals

Animal Health Monitoring

Research

- Recently completed SDSU vocalization study utilized HPWREN acoustic sensors and developed techniques to automatically filter useful audio data
- Proposed feeding study will shed light on the mechanics of Canid feeding habits without influencing the behavior of the wolves with human presence
- Proposed cross-species study of post-conflict behavior will help researchers understand the nature of sociality in primates and social carnivores, again with the benefit of being able to observe social behavior without disturbing or influencing the animals with the presence of humans

Conservation

- HPWREN connectivity has allowed for the growth of the California Wolf Center's conservation efforts, now on an international scale. Due to our remote location, this would not have been possible without HPWREN technology.
- The Center's highly endangered Mexican gray wolves can also be monitored using HPWREN technology in the future. More natural behavior will be observed with cameras, and the wolves, who are candidates for release into the wild, will be less likely to become habituated to humans because exposure can be limited.
- This technology could also have a field application that could contribute immensely to wolf recovery in the future. The results of the vocalization study, for example, could be used to determine if wolves are travelling in areas where they are likely to come into conflict with people or livestock. Targeted efforts can then be made to prevent that conflict from happening, saving the lives of wolves and advancing the work of conservationists and researchers in the field.