

## Non-native Species Introductions at Lake Tahoe

*Happy Hour with Sudeep Chandra, Ph.D. (University of Nevada, Reno)*

**Date:** Tuesday, April 10, 2007

**Time:** 5:30 – 7:00 p.m. Lecture begins promptly at 6:00 p.m.

**Cost:** \$5 donation requested.

Includes a **No-Host Bar**.

**Location:** Assembly Rooms A & B, Tahoe Center for Environmental Sciences  
291 Country Club Drive, Incline Village, Nevada (on the campus of Sierra Nevada College)

**Lecture Topic:** Non-native Species Introductions at Lake Tahoe

Lake Tahoe is a high altitude lake with habitat favorable to fish species which thrive in clear, cool waters. Prior to the mid 1800s, fish in Lake Tahoe included seven native species with Lahontan cutthroat trout as the primary game fish species. The cutthroat grew to a very large size (14 kg). In the 19th century, fish management agencies introduced numerous exotic species to the lake with the hope of improving recreational angling. These introductions included nine species of salmonids, thought to be suited to Tahoe's environment. Only four of these species, lake trout, brown trout, rainbow trout, and kokanee salmon survived and persist in the lake today. Mysis shrimp were introduced by the fish and wildlife agencies of California and Nevada in the 1960's to promote a more robust fishery. More recently, another wave of fish introductions has occurred. Species such as largemouth bass and bluegill have exploited man-made, warm, artificial embayments including marinas and the Tahoe Keys. These non-native species pose a severe threat to the persistence of native fishes such as Lahontan reside shiners, Lahontan speckled dace, and tui chubs. Moreover, they may be important recyclers for nutrients which cause algal blooms in the nearshore area.

Whether introduced legally or illegally, many of the nonnative species have had profound impacts on the ecology of Lake Tahoe. Changes have occurred with food web structure and nutrient availability in the nearshore and offshore environments. Understanding these changes are critical if we are to manage and restore Lake Tahoe's pristine environment. Moreover, preventing the introductions of nonnative species recently found within the region (especially New Zealand Mud Snails) will be critical to maintaining the ecology integrity of the lake.

**Sudeep Chandra, Ph.D.** is an assistant professor at the University of Nevada, Reno in the Department of Natural Resources and Environmental Science. Dr. Chandra specializes in food web structure, community interactions, fish bioenergetics, and restoration of native biological communities in Lake Tahoe.



**Sponsorship:** This event is sponsored by the UC Davis Tahoe Environmental Research Center (TERC), with a portion of room usage and catering services sponsored by Sierra Nevada College and Sodexo.

**Monthly Lecture Series:** The UC Davis Tahoe Environmental Research Center (TERC) Monthly Lecture Series will provide a forum for community members to gain access to scientific experts. The Monthly Lecture Series will present interesting topics in science directly to enthusiasts in nearby communities. Topics range from A to Z (air quality to zooplankton) and are pertinent to the region. Speakers include authorities on various environmental issues, scientific research and related regional topics of interest.