**The River Wolf and the Blue Pearl: Conserving Mongolia’s Aquatic Ecosystems in an Age of Global Change**

The lakes and rivers of Northern Mongolia are among the most pristine freshwater ecosystems in the world. Nevertheless, threats including climate change, overfishing, and mining have placed several of Mongolia’s salmonid fishes at risk. Populations of taimen, *Hucho taimen* – the world’s largest salmonid – have become the target of growing recreational fisheries despite the fact that taimen are classified as “endangered” on Mongolia’s red list. Do these largely catch-release fisheries represent a risk to taimen or an incentive for their conservation? Spatial management strategies such as exclusive fishing concessions have been proposed as a management tool for taimen. How large should such areas be given movement patterns and habitat requirements of adult taimen? These questions and others have been addressed through 10 years of mark-recapture and telemetry tag study in the Eg-Uur river system in Northern Mongolia.

Within the same region, Lake Hovsgol represents a unique opportunity to disentangle the effects of climate change from other anthropogenic impacts on aquatic ecosystems. Lake Hovsgol is the 17th largest lake in the world by volume and relatively free of human impacts such as urban development, pollution, overfishing, and invasive species. However, the Lake Hovsgol region has experienced an air temperature increase of more than 2 °C over the past 40 years – a rate more than three times faster than the Northern Hemisphere average. Drying of tributary streams threatens the endangered endemic Hovsgol grayling, *Thymallus nigrescens*. How have such changes impacted the rest of the Lake Hovsgol fish community and can this lake serve as a model system for understanding climate change effects on aquatic ecosystems?