## ENN: Environmental News Network -- Know Your Environment

From: Allison Winter, ENN

Published August 14, 2012 08:44 AM

## **Beavers Benefit Salmon Populations**

One would expect that beaver dams create more harm than good for fish populations, as they block certain species from swimming upstream and therefore reduce the availability of suitable spawning habitat. However, according to a new study by the University of Southampton, reintroduced European beavers could have an overall positive impact on Scottish wild salmon populations.

Funded by Scottish Natural Heritage, a study was conducted to analyze the relationship between beavers and salmon populations due to underlying economical concerns that beavers can harm fish stocks by obstructing migration. But after surveying 49 fisheries managers, scientists, and beaver ecology experts from Europe and North America, more than half of those who responded believe that the overall impact of beavers on fish populations is beneficial.

According to Dr. Paul Kemp, a researcher in freshwater fish ecology and fisheries management from the University's International Centre for Ecohydraulics Research who led the study, "the positive findings were more frequently based on quantitative evidence, while discussion of negative impacts was often speculative." Dr. Kemp also claims, "most participants were from a fisheries background and whom you might expect would tend to side with the fish, but based on their experience of beaver and fish interactions tended to be positive towards beaver."

Researchers studied over 100 sources of peer-reviewed information in which benefits were cited 184 times compared to 119 for the negative effects. Many of the negative effects are associated with dams construction as it not only impedes the movement of migrating fish, but leads to siltation which can cause loss of spawning habitat. The study finds that while the activities of beavers can result in short-term negative impacts on fish, these can be off-set by the benefits of increased habitat diversity resulting in the abundance and productivity of fish. Other benefits include the increase in area of stream habitat and ponds, an increased abundance of invertebrates (which is part of the stream-dwelling fish diet), and an increase in protection during varying water flows.

The complete study is published in the international fisheries journal Fish and Fisheries.

Beaver dam image via Shutterstock.

Tweet 0

Terms of Use | Privacy Policy

2013©. Copyright Environmental News Network