

"Keeping anglers happy has a price." is the title of an article by Science Writer Billy Goodman in the May

1991 issue of **BioScience**, pp. 294-299. Goodman recaps recent findings on the ecological and genetic effects of stocking fish – findings that again point out the fallacy of thinking of some consequences as “effects,” and others as merely “side effects.” Introduction of game fish has been found to have a variety of deleterious effects on local species. They may out-compete them, causing their extinction; they may hybridize with a rare local relative, imperiling the rarer species’ genetic integrity; they may interbreed with local populations of the same stock and disrupt the local stock’s adaptation to its environment.

The key to understanding what happens when hatchery fish are planted on top of wild fish, according to Richard Vincent of the Montana Department of Fish, Wildlife, and Parks, is to understand the different behavior patterns of wild and hatchery fish. Fish raised in a hatchery have lost their territorial behavior. Hatchery fish don’t recognize territorial signals of the wild fish; the wild fish don’t fight for the food as hatchery fish do – they simply move to other parts of the stream where cover or food may be poorer.

A sidebar box, with this article, describes the steps that Washington state hatchery managers are taking to minimize genetic impoverishment and domestication of captive-reared fish. Some hatcheries are using automatic feeders to reduce fish contact with humans, thus preserving the flight response of wild fish. They also are returning to the wild for new brood stock every several generations, thus infusing new genes into the hatchery population and breaking selection for domestication.