



FEDERATION OF FLY FISHERS™

Conserving – Restoring – Educating Through Fly Fishing

Native Fish Policy

Introduction

The Federation of Fly Fishers notes that throughout North America native fish populations have declined from historical levels, particularly over the last century or more, due to the cumulative effects of overharvest, water management, past fisheries management practices, agricultural, forestry, and mining, and other land use practices, habitat alteration or degradation, and the widespread introduction of non-native fish species. Today, the goal of many fisheries management agencies and programs is to preserve or restore native fish species to some portion of their historical native range. These goals have been driven by the legal mandates of the Endangered Species Act (ESA) in part and by the increased value that anglers, fisheries managers, conservation organizations, and other concerned citizens recently have placed on native fishes in native habitats.

Established in 2001, the Federation of Fly Fishers' native fish restoration policy herein sets forth clear principles to enable our members, clubs, and councils to speak with a consistent voice regarding proposals to restore endemic fish populations to historical habitat. A growing number of proposed restoration projects for game and non-game species challenge our ethics as sport anglers when we must choose between a popular exotic sport fishery and a conflicting imperative to restore native fish or amphibians. The policy recognizes that many proposed restoration projects are controversial among the angling community. It also recognizes that flexibility is required to handle a wide range of restoration settings and species.

Most importantly, a strong native fish restoration policy maintains and enhances the FFF's moral authority to question and fight assaults on the aquatic environments we treasure. It affirms our support for the Endangered Species Act and all its tools for protecting vital habitat.

The FFF Native Fish Policy Statement, which follows, describes the guiding philosophy of the FFF towards native fish conservation. Specific Native Fish Policies have also been developed for steelhead, saltwater fishes, and warmwater fishes. Those policies are also set forth here.

Native Fish Policy Statement

1. FFF supports fisheries management policies and practices that recognize the value of native species, including native fishes in native habitats, and does not support management policies that threaten native species with degradation or extinction. Similarly, FFF does not support the stocking of non-native fish into waters where they can interact genetically or ecologically with native fish species¹.

2. FFF recognizes the intrinsic value of native fish species and their aquatic communities. FFF supports management policies and practices that promote conservation management and restoration of self-sustaining populations of native fish and other native aquatic species. A tremendous recreational value to flyfishers is lost when these many species are no longer available in population densities capable of supporting a sustained fishery.

3. FFF recognizes that many native fish species, particularly salmonids, are remarkable for the diversity they display in their behavioral, ecological, and genetic characteristics. The biological diversity found within various fish species arose as a response to the habitat diversity they encountered in the landscape where they lived and evolved. The ecological community where they evolved, which included their predators and prey, and the fishes with which they competed, also shaped the diversity we observe in fish species today. Human activities over the last several centuries have dramatically altered aquatic ecosystems and reduced aquatic habitat diversity and biological diversity within native fish species.

FFF supports management programs and actions that promote the restoration of diverse habitats used by native fish species. Where native fish exist in or are reintroduced to these diverse habitats, a corresponding increase in life history diversity within the population is likely to occur, as adaptation and evolution are continuing processes. Increases in abundance, age class diversity, and life history diversity within a population leads to resilience, which in turn fosters a self-sustaining population.

4. FFF is concerned about the continued erosion of the genetic integrity of existing native fish populations and supports management decisions that place the protection of existing native populations as a first priority. FFF supports careful stream censuses of fish diversity to locate genetically intact native fish populations and supports management decisions and actions that ensure these populations are preserved in perpetuity and isolated from non-native species.

¹ In this document, the term 'native' refers to indigenous species and forms, and does not include non-indigenous naturally reproducing wild fish. Fisheries management throughout most of the 20th century promoted the introduction of non-native fish species. Starting in the late 1970s, managers recognized that these efforts had produced exotic fisheries with considerable recreational value to fishers, but at great expense to many native fish species. Thus, the FFF policy, while recognizing the value of these non-native based fisheries, places greater priority on managing and rebuilding fisheries throughout the country that support native fishes in their native habitats. In this context, we treat the terms non-indigenous and exotic as synonymous with non-native.

5. FFF supports the establishment of native fish sanctuaries or refuges where clusters of genetically intact native fish populations or assemblages of native fish species occur. A system of wild fish refuges throughout the country would act as an insurance policy for fisheries managers by providing non-introgressed native fish populations that could be used for transplants, reintroductions, or other recovery efforts.

As an initial step, existing *de facto* refuges, such as the John Day subbasin (Columbia River) for native spring chinook, summer steelhead, and bull trout and Idaho's Middle Fork of the Salmon River for spring and summer chinook, summer steelhead, and westslope cutthroat trout, should be identified. Systematic surveys of native fish populations are likely to identify other candidate species and refuges areas. FFF should urge federal, state, and tribal resource managers to provide formal recognition and protection for these important populations and their refuges areas.

6. FFF supports an approach to native fish species restoration that is focused on habitat and watershed protection and involves the restoration of the natural ecological processes that shape the native fish species' evolution. This approach is consistent with only a limited role, if any, for artificial production in the restoration of native fish species. The FFF approach relies on habitat restoration, control of non-native fish species, and reintroduction of native species into habitats where they have been extirpated.

7. FFF supports a goal of recovering native fish species into at least a portion of their previously occupied ranges. At the population level, the recovery goal is to achieve a viable fishery of native fish in their native streams. For some populations or species, this may require the removal of introduced non-natives from specific streams and the subsequent transplanting of native fish from nearby remnant populations. In cases where translocation from adjacent stocks is not feasible, such as occurred with the Colorado Greenback cutthroat trout and the Montana fluvial grayling, recovery programs may need to utilize artificial production from remnant stocks to achieve recovery objectives. Where implemented, such programs should be of limited duration until adequate replicate populations have become established in natural habitats.

This approach, the restoration of native fish species into at least a portion of their previously occupied ranges, should be used judiciously and will be most useful in recovering critically depressed stocks, such as ESA-listed threatened or endangered stocks, as well as fish designated by individual states and the American Fisheries Society as "sensitive" that are not officially "listed" under the ESA. Examples of these include many of the cutthroat trout subspecies: Yellowstone, westslope, Bonneville, Colorado, and Rio Grande. The approach should not be construed as an unwavering policy to eliminate all non-native fish everywhere; rather, it is one of several tools that can be used to reestablish viable populations of native fish species in their native habitats. In most cases, these programs or actions likely would be site-specific or species-specific and would require careful consideration by regional biologists and fish managers as to the likely success of the translocation effort.

8. FFF recognizes the impact that non-native fish introductions have had on native fishes and opposes any unauthorized introductions or transplants of fish species into aquatic systems. For example, the widespread stocking of hatchery rainbow trout has impacted populations of interior redband trout, nearly all interior cutthroat trout subspecies, and eastern brook trout. Conversely, introductions of brook trout in many western watersheds presently jeopardize continued existence of many bull trout populations. Similarly, transplants of native and non-native fish into previously fishless systems (or above natural fish barriers) have severely impacted indigenous amphibian diversity.

9. FFF recognizes the responsibility anglers have to avoid spreading diseases (such as whirling disease) and non-indigenous species (such as invasive snails or plants like Eurasian milfoil) from watershed to watershed. Anglers should take care to wash their fishing equipment (waders, boots, float tubes, boats, and trailers) before moving from one watershed to another.

10. FFF recognizes that sustained management of many native fish species will require restrictive fishing regulations (including a total closure of the fishery if warranted), such as barbless hooks, slot limits, or catch-and-release angling, to avoid mortality rates that will adversely affect population structure and spawning escapement numbers. For this reason, FFF supports catch-and release angling for native species as an important component of sustainable management².

11. FFF recognizes the importance and power of educating FFF members, other anglers, and the general public about the value of native fishes in our aquatic ecosystems. FFF encourages its clubs and councils to actively engage in native fish restoration projects and programs, particularly in ways that interact positively with fisheries agencies, the public, and the media. FFF members are encouraged to interact with the International Fly Fishing Center and the FFF Conservation Committee when planning native fish restoration projects, and are likewise encouraged to participate in such FFF native fish conservation awareness programs such as the Project Cuttcatch.

² See FFF Catch and Release Policy. Catch-and-release angling incurs a low level of mortality. Much of this mortality can be further reduced through proper playing, handling, and releasing of hooked fish. Anglers should use heavy enough tackle that the fish can be landed as quickly as possible. Handle the fish as little as possible, keeping it in the water; wet hands or net before landing the fish. Use long-nosed pliers or hemostat to back the hook out of the entrance hole. The use of barbless or circle hooks makes it easier to quickly unhook a fish. Hold the fish gently moving it back and forth until it revives and swims from your hands.

FFF Native Fish Policy: Steelhead

The Federation of Fly Fishers notes that West Coast wild steelhead stocks are declining rapidly and are at high risk of demographic extinction. Most wild stocks are substantially below historical levels of abundance and the wide range of genetic diversity and variability of native stocks has been and continues to be compromised by habitat alteration, excessive harvest, and ill-advised hatchery practices.

FFF steelhead goals are to preserve wild steelhead genetic diversity and variability and restore wild West Coast steelhead stocks to levels approximating historical abundance through habitat restoration, sharp restrictions of sports harvest until wild populations recover, phased elimination of mixed stock commercial fisheries, modification of hatchery practices, and, in some instances, discontinuation of hatchery supplementation.

Steelhead Native Fish Policy

1. FFF supports steelhead management that emphasizes self-sustaining wild native populations. We explicitly recognize the value and integrity of locally adapted stream/tributary specific steelhead stocks which require careful, conservative management of these irreplaceable resources giving due weight to their special habitat and escapement requirements.
2. FFF urges steelhead management agencies to accord the highest management priority to wild, stream born steelhead. Wild steelhead are at the heart of any steelhead management scheme.
3. FFF views steelhead hatchery supplementation as an admission of management failure to provide for wild steelhead. We urge the utmost caution in any steelhead supplementation program. Artificial propagation should not replace or assist natural propagation of steelhead in watersheds where individual rivers are still capable of supporting viable wild steelhead.
4. FFF supports sharp limits on angler harvest until steelhead stocks have recovered to levels that permit harvest of specific numbers of wild steelhead in each particular watershed. While stocks are recovering, FFF supports catch and release and wild steelhead release regulations, which permit recreational opportunity with minimal harm to the recovering resource.
5. FFF supports the establishment of wild native steelhead sanctuaries or refuges throughout the North American and Asian range of the steelhead. Refuges could be located where clusters of genetically intact steelhead populations occur. A system of wild steelhead refuges would act as a long-term insurance policy for fisheries managers toward future management options and to aid recovery programs.

FFF Native Fish Policy: Saltwater Fishes

The Federation of Fly Fishers notes that, when compared to freshwater zones, our coastal and deep-sea gamefish have been little impacted by introductions of non-native gamefish. There have been relatively few successful introduction efforts. Instead, problems for inshore, nearshore, and offshore marine stocks are primarily related to overharvest, lost or degraded habitats, particularly for the rearing and growth of juvenile fish, and the effects of pollution. FFF advocates vigorous, continued efforts in addressing these problems.

At the same time, we do not ignore the serious problems caused by the many exotic species that have been introduced to our marine environments, intentionally or otherwise. Where these exotic species occur, we urge their control, if not their elimination. And we urge the most strenuous efforts to prevent the introduction of new non-native species to our marine zones.

Saltwater Native Fish Policy

1. FFF supports management of saltwater gamefish that emphasizes self-sustaining wild populations. The Federation explicitly recognizes the value and integrity of geographical stock structure for many saltwater species, which requires careful, conservative management of these irreplaceable resources giving due weight to their special habitat and escapement requirements. Catch and release regulations provide an excellent management tool to protect vulnerable or depressed wild populations.
2. FFF supports harvest management regulations on saltwater gamefish that ensure adequate escapement to spawning areas for each geographical stock. The numerous recent collapses of important long-standing fisheries, such as the Atlantic Cod fishery and the Pacific groundfish fishery, point to the inadequacy of traditional harvest management practices for the long-term sustainability of many commercially important marine fish species. FFF recognizes the value of these fisheries and supports effort to define more conservative harvest practices that ensure adequate escapements for spawning.
3. For severely depressed stocks, FFF supports sharp limits on harvest (including closures) until stocks have recovered to levels that permit harvest of specific numbers in specific locations. While stocks are recovering, the Federation supports catch and regulations, which permit recreational opportunity with minimal harm to the recovering resource.
4. FFF explicitly opposes the introduction of non-native species to our marine and anadromous fisheries. The Federation is strong in the belief that any management program affecting those fisheries must guard against outside contamination and emphasizes wild, native species.

5. FFF supports the establishment of marine sanctuaries or refuges where clusters of native fish populations or assemblages of native fish species occur.

FFF Native Fish Policy: Warmwater Fishes

Warm water species have been widely distributed for the purpose of increasing angling opportunities in different parts of the world. While acknowledging the recreational value many introduced populations provide to the angling public, FFF emphasizes the damage done by these introductions into ecosystems where the introduced fish are not native and often become invasive. Proliferation of non-native fish, along with habitat disturbances, accounts for 70% percent of the 27 fish extinctions in North America. Non-native fish often prey on native species, or compete with them for resources such as spawning gravel and food. Where exotic and native species hybridize, loss of native biological diversity occurs. Consequently, a high priority for FFF is preventing further introductions of non-native species or translocating fish between watersheds. FFF realizes that managers will continue the practice of stocking warm water fish for recreational purposes, but FFF advocates the precautionary principle of ecological management whenever introductions into new waters are contemplated.

Habitat degradation has been another major cause of population decline or extinction for warm water fish species. Of particular concern, are changes in water quality, such as increased alkalinity or temperature. FFF supports management programs for warmwater species that focus on water quality monitoring and improvement, habitat preservation, and ecosystem restoration

Warmwater Native Fish Policy

1. FFF supports fisheries management policies and practices that recognize the value of native warm water species, including native fishes in native habitats, and does not support management policies that threaten native species with degradation or extinction.
2. FFF recommends preservation of remaining indigenous native warm water fish populations, and supports their expansion into suitable reclaimed habitat. FFF supports management of warm water game fish that emphasizes self-sustaining wild populations. FFF supports the restoration of degraded habitat and reintroductions of native fish species in at least a portion of their previously occupied ranges. Catch and release regulations provide an excellent management tool to protect vulnerable or depressed wild populations
3. FFF supports the preservation of existing warm water habitat that has shown to be essential for sensitive species such as smallmouth bass, and actively supports the strict control of industrial and agricultural practices that lead to habitat degradation and decreases in water quality. FFF supports water quality monitoring by FFF club monitoring teams in selected warm water habitats containing sensitive species. Early detection of water quality changes is an FFF goal.

4. The FFF advocates angler education to understanding the value of native warm water species and the ecological reasons for their preservation, the undesirability of unauthorized alien species releases and the need to prevent the transmission of other exotic species such as invasive water weeds, snails and other organisms that can radically alter the habitat of native fish.