

IT CAN START INNOCENTLY. At the end of a long day, an angler dumps his bait bucket into the water. Or it can be more sinister. A truck brakes to a halt; the driver steps out and looks furtively around. He grabs a bucket out of the back and in a few steps is at the water's edge. In a moment he dumps the bucket's contents and a new fish species joins the crowd down at the old fishin' hole. And, more often than not, there goes the neighborhood.

Illegal fish transplants are spreading across the state in a mini-epidemic and are becoming one of the major problems facing fish managers. In some cases, illegal transplants have produced worthwhile new fisheries. But the results are unpredictable, and all too often they have ruined existing fisheries, raised management costs, and caused an overall loss in fishing opportunity.

Northern pike, for example, were illegally transplanted

ILLEGAL ALIENS

by Jim Vashro
photos by Mike Aderhold

from Sherburne Lake to Lonepine (Dryfork) Reservoir near Hot Springs in northwestern Montana in 1953. By 1957, they had arrived at Echo Lake near Kalispell. In the 1970s, pike spread explosively throughout western Montana and are now found in 56 waters in the Clark Fork, Swan, Stillwater, Whitefish, and Kootenai drainages. They have recently been found in the Bitterroot River and Upsata Lake in the Clearwater drainage. This kind of sweeping spread makes fish managers reluctant to introduce fish into new waters, for fear of making them more available to the "bucket brigade."

Although pike have produced popular fisheries in parts of northwestern Montana, they have also in some instances wiped out bass, perch, and trout populations. A recent—and we hope abortive—attempt to introduce pike to Ashley Lake provides a graphic example of how senseless illegal transplants can be. Ashley Lake produces rainbow-cutthroat hybrids of spectacular size, including the current world record of 30 pounds. It would be hard to improve on that fishery, yet two dead pike were recently found there, indicating that someone thought they had a better idea. Pike have also turned up in Tally Lake, the state's deepest lake at 480 feet—hardly typical pike habitat!

Walleyes are highly regarded by anglers, and the Depart-

ment of Fish, Wildlife & Parks (FW&P) has responded by renovating the Miles City Hatchery to produce walleye fry to supplement existing populations and create new fisheries. However, the Montana Fish and Game Commission recently had to take the drastic and unusual step of banning walleye introductions west of the Continental Divide. Western Montana has a number of lakes potentially suitable for walleyes. But an environmental assessment showed that walleyes have the potential to impact trout and salmon. Experience with



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northern pike left little doubt that walleyes, if introduced to western Montana, would quickly be illegally spread to other waters where they might become a problem. The neighboring state of Idaho has had to put a moratorium on its walleye stocking program after the fish were illegally moved to a dozen new lakes. The irresponsible actions of a few people have effectively shut down a new fishing opportunity for thousands of anglers. As it is, there are at least two reliable accounts of illegal walleye transplants from east of the divide into the Flathead drainage.

This is not to say that fish introductions are inherently bad. George Holton, a retired assistant administrator for FW&P's Fisheries Division, is currently writing a guide to Montana fishes. He notes that more than half our present trout species are introduced, as are sunfish, bass, crappie, yellow perch,

and walleye. Montana's internationally famous trout fishing is based on rainbow and brown trout, both introduced. But in some cases introduced fish have been a disaster. Through competition, they have reduced many native fish to "species of special concern" status. Planned introductions now take place only after detailed environmental assessments and lengthy public review.

Violators, on the other hand, need only a bucket. Their actions are illegal, ill-conceived, arrogant, and potentially disastrous. Some of these "bucket biologists" are motivated by fishing success stories from the Great Lakes and lower Columbia River. They want to "have it all" and are impatient with the go-slow approach of FW&P. But they fail to recognize that Montana's pure waters are not as fertile—they can produce only 10% to 20% of the fish these other waters produce.

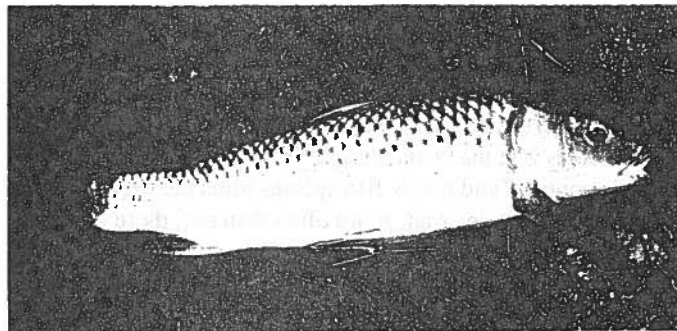
Following are a few major examples from several hundred documented illegal fish introductions across Montana. There are doubtless hundreds more that have not yet been discovered or that have failed. Incidentally, to dispel a common myth, fish are not carried from lake to lake by osprey or as eggs on ducks' feet. The chances that fish would survive that kind of handling in sufficient numbers to establish a population are nil. Firsthand and secondhand accounts leave no doubt that people are willfully and illegally moving live fish between waters.

Western Fishing District

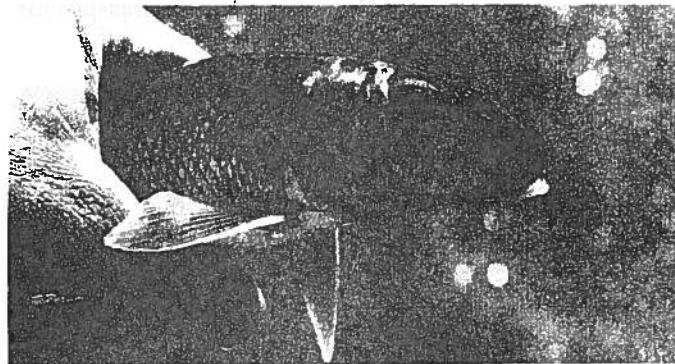
Following up on an offhand remark, FW&P fish biologist Wayne Hadley investigated a pond near Anaconda. To his shock and dismay, he found carp—dozens of them—in a self-sustaining population. Carp were brought to the United States in the late 1800s from Europe where they were highly regarded as food and game fish. American anglers, however, have greeted carp with all the enthusiasm normally reserved for cockroaches. Carp in Montana eat game fish eggs and aquatic insects, muddy the water, destroy plants by rooting on the bottom, and in general make a nuisance of themselves. If those carp in the pond near Anaconda had escaped to the nearby Clark Fork, they could have infested the Clark Fork (all the way to Lake Pend Oreille), Bitterroot, Blackfoot, and lower Flathead river drainages—640 miles of river in all, as well as thousands of miles of tributaries. The damage would have been incalculable and irreversible. Hadley quickly scheduled a "rehab" (chemical rehabilitation or poisoning with the fish toxicant rotenone) to nip the problem in the bud for about \$750.

Other problems have not been resolved as easily or as cheaply. For example, goldfish were discovered in a pond at a Missoula golf course near the Clark Fork River a few years ago. Goldfish are close relatives of carp and, when released to the wild, they can grow to several pounds and develop all the nasty habits of their cousins. The golf course paid for several rehabs, but goldfish are tough and they are still surviving.

Rogers Lake near Kalispell is one of four grayling lakes in northwestern Montana. The fish grow to a nice size (14 to 16 inches) and also supply all of the eggs for the state hatchery system. The lake was rehabbed in the mid-1970s to remove



Carp (above) were brought to the United States from Europe in the late 1800s. They eat game fish eggs, muddy the water, destroy aquatic plants, and generally make a nuisance of themselves. Suckers (below) are native to Montana, but can cause problems for game fish when they are illegally introduced, often as bait, to lakes and reservoirs.



illegally introduced reidside shiners that were depressing the grayling population. The grayling flourished until four years ago when rainbow trout, brook trout, and yellow perch were illegally introduced in rapid succession. Yellow perch are rapidly reproducing and will eventually eat the grayling into oblivion. Fishermen now catching nice trout and perch are resisting recommendations to rehab, but the lake will soon be full of stunted perch as their numbers exceed the food supply and growth rates drop.

Lagoni Lake north of Whitefish produced nice 16-inch westslope cutthroat in the past. Someone packed in northern pike, and the lake was soon full of "hammer-handle" pike and devoid of trout. The U.S. Forest Service and FW&P rehabbed the lake in 1982 at a cost of \$3,000, and the lake once again produced nice trout for three years until pike reappeared. Future management is now in limbo.

Upsata Lake near Clearwater Junction was rehabbed in the mid-1950s to remove stunted yellow perch. The lake produced good rainbow trout fishing for 29 years until the mid-1980s, when yellow perch reappeared and trout plants began to fail. The perch initially grew to 12 or 14 inches and were very popular, but soon stunted out at about five inches. The lake was closed to fishing during 1987 while 1-year-old fish-eating rainbows were being introduced. That plant was followed by a largemouth bass transplant. However, the \$16,000 worth of recovery efforts may be stymied, since unauthorized northern pike showed up in 1988.

Some fish get moved long distances. In the last few years, FW&P has discovered bluegills in Tetrault (Carpenter) Lake near Eureka and crappie in Cabinet Gorge Reservoir near

Noxon. Both fish had to come from Idaho or eastern Montana. And, in 1988, fishery crews shocked Woodland Park Pond in Kalispell in an effort to remove what they suspected to be an illegally planted northern pike responsible for the disappearance of most of the park's ducklings. They didn't find the pike but did capture a seven-pound channel catfish—the first one documented west of the divide.

Central Fishing District

Duck Lake on the Blackfoot Indian Reservation was regarded as one of Montana's premier trophy rainbow trout lakes from the mid-1950s through the mid-1960s. Suckers, probably used for bait, infested the lake and soon accounted for 90% of the fish biomass. The competition drove trout size and numbers down dramatically. Starting in 1985, the U.S. Fish and Wildlife Service (USFWS) applied rotenone (a fish poison) to two shallow bays used by spawning suckers and killed hundreds of thousands of them. Ron Skates, a USFWS biologist, notes that "suckers are now less than 10% of the fishery, trout growth rates have doubled, and some rainbow trout are once again growing to seven to eight pounds," but only after an expenditure of \$20,000. Skates cautions that the suckers are only *controlled*, not eliminated, and will still require periodic poisoning.

Farther south, another USFWS biologist, Ron Jones, found to his horror a few years ago that eastern brook trout had been moved into Arnica Creek, a tributary to Yellowstone Lake in Yellowstone National Park. Because brook trout have displaced cutthroats wherever they coexist, the brookies posed a threat to all the Yellowstone cutthroat in the lake and drainage above Yellowstone Falls. Jones notes that "the brook trout had the potential to be an ecological disaster" and not just for cutthroat. "Grizzly bears and birds (including bald eagles) use the spring cutthroat spawning run as a food source. Brook trout spawn in the fall and would have eliminated that important food supply." Jones hopes two years of rehabs have eliminated the problem, but he and other biologists are still holding their breath.

Brook trout introductions in the Beartooth-Absaroka Mountains did not end as happily, however. Brookies were spread throughout entire drainages in the 1940s and '50s, and these fish replaced other desirable species such as cutthroat trout, rainbow trout, and grayling.

Buffalo Wallow Reservoir lies northeast of Lewistown in the Missouri Breaks, where good fishing spots are few and far between. This prairie pond produced outstanding rainbow trout fishing until the mid-1980s, when yellow perch showed up. Stunted yellow perch soon replaced the rainbow trout. However, a rehab would require draining the reservoir and losing several years of fishing with no assurance of success.

Canyon Ferry Reservoir is the most popular fishery in Montana. Hefty rainbows and yellow perch provide up to 140,000 days of fishing annually. However, recent fluctuations in the fishery have raised demands for new species, particularly walleye. Concerned about potential competition between walleyes and the trout and perch, FW&P biologists are assessing the situation and gathering public input on future

management. However, the recent appearance of several northern pike and walleyes in the reservoir shows that someone is trying to short-circuit the process.

Eastern Fishing District

The eastern fishing district has dozens of small- to medium-sized ponds and reservoirs. As the following examples will attest, a high percentage are subject to illegal transplants, resulting in costly rehabilitation efforts.

Broadview Pond in Yellowstone County was once a very clear pond filled with large crappies. After carp were introduced, the pond became muddy and the crappie population declined. Rotenone treatment in 1983 did not solve the problem.

Ross Reservoir in Blaine County produced good cutthroat fishing until suckers were introduced. The reservoir had to be drawn down and rehabbed.

An experimental gill net set in Bell Ridge Reservoir (Phillips County) captured a 24-inch shovelnose sturgeon. The reservoir is 20 miles north of the Missouri River where sturgeon are normally found.

Illegal introduction of yellow perch ruined a good trout fishery in the Dredge Cut Trout Pond in Valley County. The reservoir was subsequently converted to a warm-water fishery with northern pike, walleye, and largemouth bass. In an ironic twist, a recent illegal introduction of bluegills has severely reduced the size of the yellow perch.

Gartside Reservoir near Sidney has been rehabbed three times over the past 25 years to remove black bullheads, yellow perch, carp, suckers, and pumpkinseed sunfish. More illegal species show up after each rehab, making biologists wary of any further actions.

Krieder Reservoir near Sand Springs was treated with rotenone in 1987 to remove carp and suckers. The reservoir now shows promise of being a good bass pond, but only after expenditure of about \$4,000.

America was founded on an open door policy, and our melting-pot culture has been shaped and strengthened by the infusion of various races. Montana's diverse fisheries have grown in much the same way. But illegal aliens now threaten to overwhelm both systems. Anglers need to educate themselves and others about the perils of illegal fish introductions. Live fish should never be moved between waters. And anglers should only use live bait minnows on those few waters where legally permitted. Concerned anglers with information about illegal introductions should contact an FW&P warden or biologist, or call 1-800-TIP-MONT if they wish to remain anonymous. Fines and punishment need to be stiffened to reflect the serious nature of the crime and the damage to public resources.

When fish are planted illegally, all anglers end up paying the bill. Fishing license fees that should be spent on improving habitat and creating new and better angling opportunities must be diverted to cover the cost of rehabs or planting more or larger hatchery fish. New legal fish introductions are postponed or canceled. In some cases, the damaged fishery is beyond repair. Illegal aliens hurt us all. ■

