



Transforming Lake Michigan into the 'World's Greatest Fishing Hole': The Environmental Politics of Michigan's Great Lakes Sport Fishing, 1965-1985

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Source: *Environmental History*, Vol. 9, No. 1, (Jan., 2004), pp. 102-127

Published by: Forest History Society and American Society for Environmental History

Stable URL: <http://www.jstor.org/stable/3985947>

Accessed: 07/05/2008 15:06

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KRISTIN M. SZYLVIAN

transforming lake michigan into the ‘world’s greatest FISHING HOLE’:

THE ENVIRONMENTAL POLITICS OF MICHIGAN’S
GREAT LAKES SPORT FISHING, 1965-1985

IN 1968, Harvey Duck, outdoor editor of the *Chicago Daily News*, and Dick Kirkpatrick, executive editor of *National Wildlife*, went on a fishing trip. Within a short time the pair had caught three “beautiful, silvery, pink-fleshed salmon” weighing from three to four pounds, typical of those caught in Puget Sound. Duck and Kirkpatrick were, however, not fishing in the salmon-rich waters of the Pacific Northwest; they were out on Lake Michigan, within “sight of their office!” According to Kirkpatrick, Chicago fishermen routinely caught one- to three-pound coho salmon “right off the downtown docks and breakwaters.”¹

Duck and Kirkpatrick were among thousands of sports fishermen whose voices formed a chorus of praise for the salmon-stocking program initiated by the Michigan Department of Conservation in Lake Michigan in 1966. Seemingly intoxicated by the immediate success of the salmon program, Duck, Kirkpatrick, and other supporters of the Great Lakes sport fishery focused on its recreational and economic benefits and expressed little concern for the environmental impact of stocking non-indigenous, but wildly popular sport fish in Lake Michigan—the same body of water U.S. Secretary of the Interior Stewart Udall called “sick,” *Newsweek* reported was “dying,” and political cartoonist Bill Mauldin labeled one of the five “Dead Seas.”² They also failed to weigh the social and economic costs of the decision to simultaneously dismantle the commercial fishing industry and prevent subsistence fishers, mainly American Indians, from laying claim to fisheries resources they believed were guaranteed to them under the Ottawa Chippewa Treaty of 1836.

This essay examines the environmental, political, economic, and social repercussions of the Michigan Department of Conservation's decision to reverse nearly a century of policy favoring the commercial use of Great Lakes fisheries. It shows that as early as 1959, state conservation officials began to view the recreational use of the fisheries in its Great Lakes waters as serving the greatest public good. Sport fishing and recreational tourism were offered as a means of filling the economic and cultural void created in lakeshore communities by the demise of commercial fishing and other maritime related industries. Today, it is evident that the decision to create the Great Lakes sport fishery and drastically limit or curtail commercial and subsistence fishing has had mixed social and economic effects on the lakes themselves and on inhabitants of lakeshore communities. That decision contributed to a host of unanticipated environmental, economic, and social problems that continue to pit stakeholder groups against each other and the state's conservation agency, now called the Department of Natural Resources (DNR). The result has been financially costly and socially divisive legal battles and incidents of violence and intimidation.

This essay joins a discussion—arguably instigated as early as the publication of E. P. Thompson's *Whigs and Hunters*—that questions the far-ranging social consequences of policies and customs that privilege the recreational use of natural resources over subsistence and commercial use.³ Together, Edward Ives, Karl Jacoby, Mark Spence, Louis Warren, and others have shown that by the twentieth century, federal and state conservation officials were eliminating or sharply curtailing the demands made upon fish and game resources by Indians, squatters, poachers, and those who hunted and fished for the market in favor of those made by sportsmen, often from outside of the community.⁴

Historian Peter Schmitt found that the “arcadian mythology” that emerged in response to the dramatic industrial transformations of the late nineteenth century—which threatened to despoil Yosemite, Yellowstone, and other places of sublime natural beauty—helped to ennoble the outdoor recreational experience.⁵ Camping, fishing, hunting, and hiking became modern environmentalism's counterpoints to the destructive practices defacing the American landscape. But until recently, few have questioned how America's arcadian myth created, in the words of Jacoby, a contested “moral ecology.”⁶ New public policies encouraged the commodification of the outdoor recreation experience and put in motion vociferous debates over allocation with distinct winners and losers (cultural, economic, and social) and little forethought for long-term environmental impact.

By the dawn of the twenty-first century, after years of appropriation by cultural and market forces, modern American environmentalism actually had inverted some of its most sacrosanct principles. The political wars that raged over Lake Michigan's fisheries after World War II bore witness to these dynamics. The decision to turn the Great Lakes into “one vast artificial fish farm” in the words of historian William Ashworth, was but one part of the larger process of improving their tarnished image as an industrial dumping ground and transforming them into the water playground of the upper Midwest.⁷ The steadfast faith of Michigan conservation officials that sport fishing was a palliative for urban ills is evidence

of the enduring power of the belief that industrial America could find redemption and virtue in nature.

THE COMMERCIAL FOCUS OF FISHERIES POLICY

DURING THE EARLY twentieth century, one of the most frequently reproduced photographs of fishing in the Great Lakes region featured American Indians standing in canoes fishing with dip nets in the same manner described by French Jesuit missionary Father Claude Dablon during a 1669 visit to the rapids of the St. Mary's River in present day Sault Sainte-Marie, Michigan.⁸ Such popular photographic and artistic depictions of native fisheries often failed to reveal the extent to which the Ottawa, Chippewa, and other lakeshore American Indians lacked the economic and political power necessary to assert fishing rights under the Treaty of 1836 and prevent the construction of the Soo Locks and other commercial and industrial development destructive to their traditional fishing grounds.⁹ They appeared on postcards and elsewhere at a time when the harvesting of fish on the Great Lakes was neither a Native nor locally oriented endeavor; it was a heavily commercialized and mechanized industry controlled by economic interests operating both within and outside of the region.

After an unsuccessful appeal to the Michigan Supreme Court in 1930 to assert their treaty fishing rights, lakeshore Indians worked in the fisheries either as holders of state-issued commercial licenses, employees of Euro-American commercial license holders, or subsistence fishers. Despite the small number of Indians and their families who laid claim to Lake Michigan fisheries resources during the early twentieth century, fishing was never far from their collective consciousness. Skip Duhamel of the Grand Traverse Bay Band of Ottawa and Chippewa recalled how the fishing treaty rights activism of his father, Arthur "Buddy" Duhamel, was in part inspired by tribal tradition. The elder Duhamel believed that a collection of long-abandoned gill nets belonging to tribal elder Joseph Sands compelled him to take up the work of past tribe members and begin fishing again.¹⁰

Sport fishermen, like American Indians, made relatively modest demands on Great Lakes fisheries resources prior to the creation of the sport fishery in the mid-1960s. Sportsmen were not required to purchase a license to fish Michigan's Great Lakes waters until 1968, largely because so few had the expertise, boats, and gear necessary to fish on the big lakes. At the same time, however, early twentieth-century photographs and postcards showing crowds on city docks and piers angling for perch, walleye, or other species running close to shore provide visual evidence of urban dwellers eagerly seeking access to Lake Michigan. During the 1930s and 1940s, interest in sport fishing on the Great Lakes increased with the growth of automobile leisure travel and the availability of reliable and affordable marine diesel and gasoline engines. Sportsmen seeking lake trout—a commercial species found in cold, deep water—patronized "deep sea" fishing charter boat operations based in Traverse City and other northern Michigan ports popular with seasonal residents and tourists.¹¹

In contrast to American Indian and sport fishermen, commercial fishermen placed a tremendous demand on Lake Michigan's resources in the years prior to the creation of the sport fishery. As historian Margaret Beattie Bogue has shown, by the 1840s, Euro-American fishermen were making claims upon Lake Michigan fisheries within a context increasingly defined by corporate priorities. The same forces that challenged the ability of farmers, loggers, and others employed in the region's extractive industries to operate as independent, autonomous agents in the free market also affected the ability of individual fishermen to uphold their occupation's orientation to local markets and informal family or community management systems.¹²

The pressures of industrial capitalism, not the failure of traditional patterns of resource use, prompted Great Lakes commercial fishermen to respond to diminishing stocks in the 1870s and 1880s by purchasing steam, and later, gasoline- and diesel-powered fish tugs so they could fish longer and harder. By 1885, commercial fish production in Michigan's Great Lakes waters was at its height, with an estimated 8.1 million pounds of whitefish and 5 million pounds of lake trout harvested annually. A decade later, whitefish harvests dipped to 3.3 million while lake trout increased to 6.2 million. Throughout the early twentieth century, stocks declined steadily with combined whitefish and lake trout harvests falling from 13.8 million pounds in 1930 to 6.9 million pounds ten years later. After World War II, the combined harvest of all high-grade commercial species was 12 million pounds in 1955 and 7 million pounds in 1965.¹³

Fishery stocks in Michigan's Great Lakes waters declined, in part, as a result of over-fishing brought about by improvements in commercial fishing technology and methods. Fishermen became more and more technically efficient at catching fish at the very time when the most urban of the lakes, Lake Michigan, was under assault from sewage from lakeshore cities and industrial waste from the mills and factories that produced lumber, paper, automobiles, machinery, electrical power, and processed agricultural products such as sugar beets.¹⁴ Following World War II, the damage done by the non-indigenous sea lamprey, an eel-like parasite that infested Lake Michigan and its tributaries in the 1930s, became increasingly evident: Lake trout and other commercial stocks dropped sharply.

By the time the U.S. Commission on Fish and Fisheries was created in 1871 and the Michigan Fish Commission established two years later, pollution was a problem in the Great Lakes, particularly near the largest cities on the lakeshore.¹⁵ During World War I, when concern about the wartime food shortages was high, University of Illinois professor of entomology S. A. Forbes found that Chicago's "trade waste" had the potential to reduce the nation's food supply by an estimated 15 million pounds of fish a year. Water was pumped from Lake Michigan into the Chicago River in order to pass a "'slow moving mass of filth' through the drainage canal and into the Illinois River."¹⁶ Small cities also contributed to the pollution of Lake Michigan. According to a 1934 report in *Michigan Tradesman*, fish spawning grounds at Muskegon and Grand Haven were "entirely unfit to function in this natural process."¹⁷

From the late nineteenth century through World War II, an informal division of labor or jurisdiction existed between state and federal fisheries officials

assigned to the Great Lakes. Fisheries officials from the Michigan Fish Commission (the Fish Division of the Department of Conservation beginning in 1921) devoted their meager resources to the management of the inland lakes, rivers, and streams most popular with and accessible to sports fishermen. The Department of Conservation also licensed commercial fishermen, monitored their catches, and enforced fisheries laws within the state's Great Lakes waters. Budgetary restrictions prevented the department from establishing a research program on Great Lakes fisheries until 1930, when an ad hoc relationship with the University of Michigan was formalized through the creation of the Institute for Fisheries Research.¹⁸

Though Michigan had legal jurisdiction over the Great Lakes waters within its borders, the state allowed federal fisheries officials to take the lead in policy issues pertaining to Great Lakes fisheries research and management until the salmon-stocking program began in 1966. The U.S. Fish and Fisheries Commission and its successor agencies, the Bureau of Fisheries under the U.S. Department of Labor and Commerce (1903) and the U.S. Fish and Wildlife Service (USFWS) under the Department of the Interior (1940), established a research presence on the Great Lakes during the 1870s. The establishment of the Great Lakes Fishery Investigations in 1927 and the National Recovery Administration's Great Lakes fisheries board in 1933 brought increased federal involvement in Great Lakes commercial fishing. So did the outbreak of World War II.¹⁹

The sea lamprey crisis of the late 1940s and early 1950s—one of the “most dramatic conservation stories of all time,” according to the Michigan Department of Conservation—represented the height of state and federal cooperation on behalf of Great Lakes fisheries. By 1955, the Great Lakes Fishery Commission, a U.S. and Canadian body, was providing funding through the U.S. State Department to the USFWS for the control of sea lamprey and the restoration of indigenous lake trout as the top predator fish in the American waters of the Great Lakes.²⁰ State fisheries officials helped USFWS officials pinpoint locations for the application of the specially developed chemical lampricide known as TFM. They also worked together to build and maintain electrical weirs and other sea lamprey control devices.²¹

In the late 1950s, once it appeared that TFM and other lamprey control measures were effective in reducing (although not eliminating) sea lamprey propagation, the Department of Conservation prepared to assert its authority over Michigan's Great Lakes waters. By 1964, for the first time in nearly a century, Michigan fisheries officials adopted policy goals that placed them at odds with their federal counterparts.²² The decision by the Department of Conservation officials to stock salmon in Michigan waters placed them on a collision course with the USFWS. Federal fisheries officials were committed to the restoration of the commercial fishery by rebuilding stocks of lake trout until natural regeneration took place. The restoration of Great Lakes commercial fishing not only was a second priority to the Michigan Department of Conservation, it ultimately was viewed as a threat to the creation of a Great Lakes sport fishery.

The alewife crisis of the mid- to late 1960s revealed the growing distance between state and federal fisheries officials over the management of Great Lakes fisheries. The alewife was a non-indigenous species whose population exploded when predatory fish stocks were severely diminished by the sea lamprey. Federal fisheries officials saw the alewife as forage food for the indigenous lake trout they were attempting to re-establish. W. Fenton Carbine, the Great Lakes regional director of the U.S. Bureau of Commercial Fisheries, supported the commercial harvest of alewife in Michigan waters using trawling devices similar to those already in use in Wisconsin. Carbine, who had worked as a biologist for the Michigan Department of Conservation until 1948, appealed to Michigan Governor George Romney in an unsuccessful attempt to halt Department of Conservation officials from stocking salmon in the state's Great Lakes waters. His efforts backfired and even may have resulted in his reassignment out of the Great Lakes Region.²³

Michigan's decision to assert its legal jurisdiction over the fisheries in its Great Lakes waters and place sport fishing at the center of its efforts to reconstitute lakeshore land-use patterns can be understood best within the context of post-World War II America embarking on the mass consumption of outdoor leisure activities. Converting the state's urban waterfronts, harbors, docks, piers, and other facilities from commercial and industrial use to recreational use was a multi-faceted task; it was hardly a policy that fit seamlessly into Lake Michigan's pre-existing urban infrastructure. Quite the contrary, this conversion would require major reconfigurations to the region's maritime landscape. As historian Robert Archibald noted when recalling his childhood in the mining town of Ishpeming, even the remotest corners of Michigan's Upper Peninsula coastline bore physical evidence of over a century of industrialization and exploitation of natural resources.²⁴

From New Buffalo, Michigan, northward, Lake Michigan's eastern shore was strewn with docks, wharves, shipyards, mills, factories, warehouses, power plants, railroad sidings, coal yards, and other "eyesores" incongruous with the plan to recast the lake as an outdoor recreational paradise. Commercial fishing operations in St. Joseph, Grand Haven, and other Michigan ports were viewed by conservation officials as impediments to economic progress and the promotion of sport fishing, lakeshore real estate, and dining, lodging, and retail facilities catering to sportsmen and leisure travelers. Developers apparently saw little of the picturesque charm of decaying New England fishing villages founded in the age of sail in Great Lakes fishing villages that bore the stamp of industrialization. Rusting steam or gasoline powered fish tugs, aging fishing sheds, and obsolete reel yards were perceived as unsightly reminders of a dying industry that compromised the tourist appeal of the lakeshore cites and towns, particularly those on the lake's southern shore closest to U.S. Interstate Highway 94, connecting Detroit and Chicago. Commercial fishing operations engendered even less consideration from policy makers when their gill nets and trap nets contained by-catch of game species.²⁵

Officials in Michigan's Department of Conservation acknowledged the role population and economic pressures played in persuading the state to redevelop

its Great Lakes waters to foster economic development and recreation as early as 1955:

Economists and other authorities tell us that certain trends and conditions basic to a continued increase in vacationing are apparently here to stay. They say, for instance, that the population spiral is just beginning to gather speed. They point to earlier retirements, longer vacations, higher incomes, more automobiles, and more and better highways.

The total of these conditions is a demand; a relentless, exacting demand upon those fundamental resources, land and water. Here, then, is the CONCERN. If more and more people are going to use Michigan's land and water in the fulfillment of vacation pleasures, where do we go from here?²⁶

In 1959, Justin W. Leonard of the Michigan Department of Conservation observed that mankind insisted on "being clothed, housed, and transported by the latest developments of science. But when we go fishing, we shuck off civilization's thin veneer." Now that man faced the "constant threat of atomic annihilation," outdoor activities such as fishing were more important than ever because they offered the chance to "prove to ourselves that we are still as able to fend for ourselves as our primitive ancestors."²⁷

Leonard believed that Michigan was well positioned to offer anxiety-ridden urban dwellers the restorative outdoor recreation and "elbow room" they craved. The state's ability to provide sport fishing and other forms of recreation "in, on, and near water" into the 1990s and beyond depended, he argued, on careful natural-resource planning beginning with the Great Lakes. The Great Lakes offered the strongest prospect for the type of sport fishing that was the antithesis of "easy, predictable, and wholly certain methods of taking fish that science makes possible."²⁸

Reacting to these sentiments, the Michigan Department of Conservation began to forge a fisheries policy and a rhetorical campaign that fused the perceived economic benefits of favoring sport over commercial fishing with cultural perceptions regarding the therapeutic value of outdoor recreation. In 1967, Glen C. Greg, the department's deputy director for recreation, viewed state appropriations for the construction of recreational facilities as necessary to counter "city ills occasioned by a lack of suitable playgrounds, of concrete without the relief of greenery nearby." Greg, like earlier generations of social workers and reformers, believed that fishing and other wholesome outdoor pursuits offered the potential to uplift city dwellers morally.²⁹

The Michigan Department of Conservation defended its decision to favor sport over commercial and subsistence fishery claims in part by downplaying the importance of the commercial harvest. Claude VerDuin, the editor of the industry periodical *The Fisherman*, complained as early as 1948 that the effort to combat sea lamprey infestation "*was too little and too late*" to save the commercial fishing industry. He saw the Department of Conservation's early failure to protect lake trout and whitefish as vanquishing any hope of reviving commercial fishing.³⁰

The sea lamprey's destruction of commercial fishing stocks did in fact, help the Department of Conservation break what remained of the political and

economic power of Michigan's commercial fishing industry and quell any opposition to shifting its policy orientation to favor sport fishing. Through its official organ, *Michigan Conservation*, and other media, the department suggested that commercial fishing had gone the way of logging and mining; it was an industry whose economic and cultural significance to the state and its people lay only in the past. A 1955 profile of commercial fisherman Adson Casey portrayed the Fairport, Michigan, native as a member of a dying breed for whom a "sad violin should be played." Despite an acknowledgement that such a response was "no answer for these are men and this is their work and they are not giving it up," the Department of Conservation accepted no responsibility for its part in the demise of commercial fishing. Nor did it contemplate any type of direct or indirect financial aid for Casey or other commercial fisherman reduced to the pursuit of "marginal species" such as chub in order to pay their bills.³¹

The Casey article still concluded with the admonishment that the commercial fishing industry "deserves whatever support the public can give" because it was "good conservation" and a "wise use" of a natural resource." Furthermore, readers were reminded that commercial fishing was economically "important to Michigan" and constituted a "colorful chapter in Michigan history." The sentiment behind such expressions of hope for the survival of Great Lakes commercial fishing found in the Casey piece starkly contradicted the image presented on the magazine cover. A photograph of the Saginaw Bay fishing community, Bayport, Michigan, showed a fisherman unloading a trap-net boat near a dilapidated shed and two abandoned boats. The scene was described as "characteristic of quiet times now facing the industry."³²

Three years later the Department of Conservation continued to send readers of *Michigan Conservation* mixed messages regarding Great Lakes commercial fishing. An article expressing optimism for the return of the whitefish, the once-abundant commercial species devastated by the sea lamprey, was accompanied by a photograph of an derelict fishing boat and fishery complex. The caption indicated that "[s]hored up boats, broken drying racks and sagging fish houses" were "mute reminders of a once thriving industry that is now dying."³³

Michigan's advocacy of the commercial exploitation of the Great Lakes fisheries came to a symbolic end in 1959 when the Department of Conservation announced the retirement of Captain Charles Allers and *Patrol Boat No. 1*. Allers and his ship had served on the front line of enforcement of commercial fishing laws and regulations since 1929.³⁴ Now, responsibility for developing and implementing the state's commercial fishing policy fell to Department of Conservation staff members whose education in fisheries science, wildlife management, or law enforcement was valued more highly than skills and experience acquired as commercial fishermen working on the lakes. The departure of Allers from Michigan's Great Lakes waters was punctuated by a Department of Conservation announcement that it now considered the Great Lakes "our last major frontier as far as sport fishing is concerned."³⁵

The Michigan Department of Conservation spent nearly a decade carefully grooming the public to believe that the demise of the commercial fishing industry

was brought about by the actions of the industry itself and the invasion of the sea lamprey; not surprisingly, public policy choices were not mentioned as having anything to do with the plight of fishermen like Adson Casey. The Great Lakes was now a blank slate on which state officials could rewrite the history of the fisheries. The arrival of Ralph A. MacMullan in 1964 as director of the Department of Conservation erased any remaining ambiguity regarding the direction of Great Lakes fishing policy. He immediately hired a new fisheries chief whose education, professional training, and personal history allied him with sports fishermen, not commercial fishermen: Howard A. Tanner's interest in sport fishing originated in the small lakes and streams of his native Antrim County, Michigan, where, as a youth, he fished and worked as a guide. After completing his Ph.D. in Fisheries Science in 1952 at Michigan State University, he taught at Colorado State University and then joined the staff of the Colorado Game, Fish, and Parks Department, where his interest in sport fishing, particularly salmon, strengthened.³⁶

Given carte blanche by MacMullan to do something "spectacular" for Great Lakes fisheries, Tanner downplayed the economic and historical importance of the commercial fishing industry to Michigan. In 1965, he argued that the "commercial fishery, while providing livelihood for several hundred people, was never a major fishery by marine standards." Hampered by its "small" size and plagued by "numerous problems ranging from marketing difficulties to overharvesting," the industry "suffered a long gradual decline."³⁷ Now, the gravely ill patient looked only for a merciful end to its sufferings.

With the commercial fishing industry reduced to a shadow of its former self, Tanner was confident that the time had come for the Great Lakes to serve the growing demand for outdoor recreation. Eager to reverse the downward trend in the sale of state fishing licenses, he was convinced that the development of a Great Lakes sport fishery by planting various types of Pacific salmon in Michigan waters would create renewed interest in angling. Tanner maintained that the management of Great Lakes for sport fishing offered "the most good to the most people." He claimed that even though the state's Great Lakes waters now would "be managed first for the benefit of the recreational fishermen," there was still a place for the commercial fishing industry. In order to achieve "an appropriate maximum harvest," commercial fishermen would be allotted the fish that recreational fishermen either did not want or could not catch.³⁸

The Michigan Department of Conservation made the decision to stock non-indigenous salmon in the sixth largest body of fresh water in the world with remarkably little preparation and public input. Tanner and state fisheries officials broke with tradition when they began stocking salmon over the objections of the USFWS, but they did not violate or disregard state or federal environmental laws and restrictions. As former gubernatorial environmental adviser Dave Dempsey has observed, procedures such as the preparation of an environmental impact statement, familiar to policy makers and administrators today, did not exist.³⁹

Tanner and Wayne Tody, the fisheries scientist who replaced Tanner when he joined the faculty of Michigan State University in 1966, asserted their authority

over their federal counterparts through the salmon-stocking program. Given their go-it-alone approach, it is hardly surprising that they did not conceive of the salmon-stocking program from a multi-state or bi-national perspective. Furthermore, the Department of Conservation did not consult with state or local leaders involved in economic development, tourism, and other related areas. Conservation officials apparently believed that the other Great Lakes states and Canada would rally behind the sport fishery once it took off. When “coho fever” gripped the Lake Michigan coast, they thought, the wisdom of Michigan’s decision to forge ahead to create a Great Lakes sport fishery and close the door on its commercial fishing past would be evident.

SPORT FISHING AS REMEDY FOR AILING COMMUNITIES

MICHIGAN’S DECISION to switch the focus of its Great Lakes fishing policy from commercial to sport use seemingly was endorsed by nature itself. The population of non-indigenous alewife exploded during the mid-1960s, probably as a result of the near loss of lake trout—the dominant fish in the food chain—and the lack of ecological balance within the lake.⁴⁰ Millions of dead alewife fouled Lake Michigan’s beaches, clogged power plant, factory, and municipal water-intake systems, and created a serious urban stench and disposal problem. The alewife wreaked havoc on the state’s efforts to promote tourism; in 1967 alone, the die-off of approximately 200 million pounds of alewife cost Michigan an estimated \$55 million in tourist revenues.⁴¹

Michigan fisheries chief Tody saw a silver lining in the alewife crisis. The alewife would become forage food for salmon and pave the way for what would be the “world’s finest fishery” by 1975. By the late 1960s, the fisheries chief’s prediction was, in the eyes of some, reaching prophetic proportions. It appeared that as Tody hoped, the Great Lakes could be transformed from a “biologic wasteland to a great source of natural wealth.” With an almost unlimited supply of forage food, the salmon achieved a rate of growth that stunned the Department of Conservation’s fisheries biologists and the Oregon fisheries officials who supplied the first batches of coho eggs in the fall of 1964. The Department of Conservation’s bold experiment seemed a success as immature jack salmon made their ascent up Lake Michigan streams and rivers in the fall of 1966. Two decades of somber sentiment gave way to a new mood upon Lake Michigan. Known variously as “coho fever” or “coho madness,” the new sentiment emboldened Michigan’s policy makers and sport fishing communities, and, in dramatic fashion, reconfigured the environmental politics of Lake Michigan.⁴²

News of the rapid growth of coho could hardly be contained; it reportedly “spread like wild-fire among sportsmen.” In Frankfort and other lakeshore cities and towns, economic and social conditions “resembled a gold rush,” in the words of the nationally prominent outdoor writer Ben East. *Sports Illustrated* observed that crowds of fishermen made west Michigan’s port cities appear as though they had “virtually been upended.” After talking to a local citizen, sports fisherman and writer Jerry Chiappetta described anglers swarming the municipal boat launch in Manistee and working out a system whereby at certain times on Labor



Sports fishermen flocked to the tributary rivers and streams of northern Lake Michigan during salmon spawning season during the late 1960s and early 1970s. Unprepared for the onslaught of thousands of salmon-crazed anglers, small cities and towns such as Manistee, Michigan lobbied the state to provide funds to improve public access to Lake Michigan and build boat launches and other public facilities.

Courtesy of Norm Spring.

Day weekend, 1-3 September 1967, they were launching a boat every thirty seconds.⁴³

Chiappetta reported to *Field & Stream* readers that the Manistee Board of Commerce enlisted volunteers to aid the droves of fishermen who came to the city to spend Labor Day weekend in pursuit of salmon. While engaged in this civic service, the volunteers gathered demographic and consumer preference information from the fishermen. They discovered that many anglers came to the city “by boat from Chicago, Michigan City, Milwaukee, and many other cities hundreds of miles away.” Other fishermen arrived on airliners “loaded with passengers” or traveled by automobile on “jammed” highways.⁴⁴

Representatives from the Department of Conservation who observed the coho fishing scene during the 1967 Labor Day weekend estimated that about six thousand salmon averaging twelve pounds each were caught. Some of the coho caught by holiday anglers weighed up to twenty-two pounds.⁴⁵ The 1967 Labor Day weekend not only marked the beginning of Great Lakes sport fishing tourism in Michigan, it also helped to inaugurate a sales frenzy of fishing magazines and guidebooks, boats, outboard motors, tackle, and guide services and charter boat excursions—a frenzy that would last for nearly a decade.

Fishing magazines and guidebooks such as *Catching Coho!* presented Great Lakes salmon fishing as exciting and glamorous. These publications assured novice fishermen that with a few simple instructions and the right gear, they

could net a fish that would impress their friends and co-workers. In the early spring of 1970, *Field & Stream* reported on prolific runs of salmon in the southern end of Lake Michigan where “even Chicago’s pier pigeons got their licks in.”⁴⁶ Fishing magazines and guidebooks also aided experienced fishermen who followed the seasonal migration of the prized game fish. Chicago anglers were instructed to head out to Lake Michigan as soon as the ice broke up before the coho moved farther out into the lake and began to move northward.⁴⁷

Fishing publications not only spread the word about the Great Lakes sport fishery, they also boosted the growth of a market for boats, outboard engines, fishing tackle, and other related goods and services. Boat dealers in Lake Michigan communities apparently experienced little difficulty convincing salmon-crazed fisherman that a new boat would help them land a trophy-sized fish. *Newsweek* reported that sales of Chrysler Corporation recreational fishing boats increased 40 percent in 1968. By 1974, leading boat manufacturers such as Seacraft were marketing boats for sports fishing on the Great Lakes. *Popular Science* favorably rated the company’s new twenty-three-foot Tsunami for use on the Great Lakes, despite the seeming incongruity of the model name.

Some sports fishermen purchased larger boats with more powerful engines when they discovered that their existing small craft were inadequate for catching salmon out on the big lake. Russell McKee of the Michigan Department of Conservation indicated that it was typical for a fisherman to arrive in a town such as Frankfort with a twelve-foot rowboat and ultimately leave “towing a spanking new 18-foot on a trailer with a 40 horse outboard attached all right off the showroom floor at a total cost of about \$2,500.”⁴⁹

Whether McKee’s claim was exaggerated or not, Great Lakes sport fishing offered good reason for manufacturers, wholesalers, and retailers of boats, engines, and gear to praise the Department of Conservation and Howard Tanner as the father of Great Lakes sport fishing.⁵⁰ A spokesman for the Milwaukee-based Evinrude Motor Corporation, told *Business Week* that coho fishing was one of the “greatest stimulants to motor sales in the history of outboard manufacture.”⁵¹

Boat and outboard engine manufacturers were not alone in reaping benefit from the new salmon fishery. Nationally known fishing tackle manufacturers such as Shakespeare and Heddon, many based or originally founded in the Great Lakes region, quickly responded to the opening of the Great Lakes sport fishery by developing rods, reels, and tackle suitable for salmon and lake-trout fishing. In October 1968, Heddon announced that sales of tackle were up 25 percent over the previous year.⁵² According to the public information director of the American Fishing Tackle Association, coho gear dominated its 1968 trade show. He reportedly called Great Lakes sport fishing the “greatest single thing that’s happened since sliced bread.”⁵³

The retail market for Great Lakes sport fishing gear attracted national attention. According to a 1968 report in *Time*, one Manistee retail operation sold \$1,300 worth of lures on a single Saturday. Fishing tackle was a hot commodity not only on west Michigan’s coho coast, but all over the state. Detroit’s leading department store, the J. L. Hudson Company, opened a new coho department to



Television shows such as ABC's "Wide World of Sports" helped to publicize the Great Lakes Sport fishery nationwide. Sports magazines also helped convince anglers that trophy sized fish lurked in Great Lakes waters minutes from downtown Chicago and Milwaukee. Howard Tanner, Ph.D. who created the salmon stocking program in 1966, is located second from the left.

Courtesy of Howard Tanner.

serve office, store, and other workers who, one might suppose, purchased lures at lunchtime in anticipation of a weekend or vacation fishing trip. According to a 1968 report in *Newsweek*, the retail giant anticipated \$200,000 in annual fishing tackle sales.⁵⁴

The demand for sport fishing gear soared not only because the salmon fishery attracted many new fishermen, but also because many veteran sportsmen discovered that their existing gear was not sufficient to catch game fish in the Great Lakes. Down riggers were necessary to get hooks to the depths where a salmon or lake trout might be found, especially in warm weather. Even fishermen who began the season with all the latest coho fishing gear often found it necessary to return to the tackle shop for more. Russell McKee of the Department of Conservation observed that salmon often ruined fishing gear because they "fight with mean-tempered fury." Fishermen whose "rods were broken, reels stripped, [and] thumbs burned" when landing salmon found it "nearly impossible to buy heavyweight tackle in sporting good stores anywhere in Michigan. Everything was simply sold out."⁵⁵

The coho craze that began in Michigan on Labor Day weekend 1967 also contributed to the formation of new charter-boat operations and fishing-guide services. The popularity of charter-boat fishing on Lake Michigan was boosted by accounts in national sports magazines and television shows such as the *Wide World of Sports*. In May 1976, a member of the fishing party hosted by writer John O. Cartier of *Outdoor Life* caught a twenty-two pound chinook while on board

a charter boat based in Muskegon, Michigan.⁵⁶ By 1989, according to a report in the *Saturday Evening Post*, there were about nine hundred charter boat license holders on the Great Lakes. Two-thirds of them were based in the Lower Peninsula of Michigan in cities in the southern portion of Lake Michigan closest to Chicago, Gary, Indiana, and other population centers.⁵⁷ Charter boats also operated out of small northern Michigan ports including Manistee, Ludington, Traverse City, and Leland.⁵⁸

The Department of Conservation faced little serious criticism from state or local elected officials, nationally known sportswriters like East, Chiappetta, and Cartier, or organizations such as the Manistee Board of Commerce for its failure to prepare lakeshore communities for the onslaught of sports fishermen. The state did not construct boat launches, docks, fish cleaning stations, campgrounds, and other public facilities before they arrived. On 23 September 1967 it became evident, in the words of one observer, that coho fever was “more than the small towns of the area of the salmon streams were prepared for.” The storm that stuck off the coasts of Frankfort, Honor, and Manistee on that day claimed the lives of seven fishermen. An estimated 150 fishermen whose boats overturned in the high winds and waves were rescued by the U.S. Coast Guard.⁵⁹

The tragedy forced the Department of Conservation to acknowledge that many of the factory, office, and retail workers it encouraged to head out on the big lakes during their leisure hours had neither the expertise nor the equipment to safely boat and fish on the Great Lakes. In anticipation of the opening of the 1968 fishing season, the Department of Conservation “planned everything possible to give coho fishermen maximum safety.” The U.S. Coast Guard further helped to assure sportsmen by agreeing to rescue boaters by helicopter if necessary.⁶⁰

The deadly September 1967 storm on Lake Michigan’s coho coast increased public awareness of the potential risks of Great Lakes sport fishing but failed to dampen enthusiasm for it. As MacMullan, Tanner, and Tody anticipated, all branches of Michigan state government came forward to support the Great Lakes sport fishery when it proved successful. The executive and legislative branches of government provided the strongest endorsement by supporting increased appropriations for the Department of Conservation to build new fish hatcheries and maintain the fledgling sport fishery. Lieutenant Governor William G. Milliken wooed an audience gathered at the State Chamber of Commerce “coho victory-celebration” dinner held in March 1968 in Detroit with details of the program’s success. He observed that on one Sunday in September 1967, an estimated 6,142 boats carrying about 18,000 fishermen plied the state’s waters in search of the mighty salmon.⁶¹

The Michigan Department of Commerce gathered evidence to show both the legislature and the public the economic impact of sport fishing and related tourism. Members of the state legislature who favored increased appropriations for the Department of Conservation were gratified to find that in an eleven-county area bordering Lake Michigan, retail sales saw an “increase of 26.8 million dollars in the fall of 1968 as compared with the 1964-66 norm.” This figure was more than double the 11.9 million dollars recorded for the fall of 1967.⁶²

In order to promote the salmon fishery, the Department of Conservation arranged for Stan Lievense, a staff biologist whose talent as a sport fisherman later gained him entry into the National Sport Fishing Hall of Fame, to be hired by the state's tourism bureau. As Michigan's official "coho ambassador," he traveled around the state and the region speaking to sportsmen's groups and demonstrating the use of fishing gear developed specifically to catch salmon in the Great Lakes.⁶³

In order to protect America's newest sport fishing frontier and alleviate growing public concern with pollution in the Great Lakes, the Department of Conservation began to work in closer cooperation with those charged with overseeing water quality on the Great Lakes at the state and federal level. Fortunately for Michigan, according to a 1968 report in *Science*, Great Lakes research was "in vogue" and research funds were directed to Big Ten universities and the U.S. Department of Interior's Office of Water Resources Research to improve Lake Michigan water quality.⁶⁴

Ken Schultz, a prominent sport fisherman and writer, described Michigan's Great Lakes sport fishing program as "part of a water-resource and recreation-recovery story that has no parallel in history." It was a "story with all the drama of a TV mini-series, full of ups and downs, right and wrong, use and abuse, wisdom and folly, greed and dedication—and, as of now, a happy ending." Despite Schultz's assertion, the Great Lakes sport fishing story had more than one ending and not all of them happy. The affliction that *Time* called "coho madness" produced mixed results both for Lake Michigan and the cities and towns on the lakeshore and their inhabitants. It also created a new set of public policy issues that still are being debated today.⁶⁵

THE COST OF CREATING THE SPORTS FISHERY

THE CREATION of the Great Lakes sport fishery aided economic growth on the local, regional, and national level by encouraging sales of boats, outboard motors, and fishing tackle. Marina, lodging, retail, and dining facilities, charter boat operations, and guide services catering to sport fishermen were built in Frankfort, Manistee, and Leland (Michigan); Hammond (Indiana); Algoma and Sturgeon Bay (Wisconsin); and other places on the Lake Michigan coast. Local communities also benefited from the expenditure of public funds to improve boaters' access to Lake Michigan and its tributaries and construct public campgrounds, restrooms, and other facilities.⁶⁶

The construction of boat launches, campgrounds, and other facilities for sport fishermen were among the programmatic expenditures necessary to support the Great Lakes sport fishery. As early as 1967, Department of Conservation officials sought increased allocations to build as many as three new hatcheries to raise salmon for the fishery. The enforcement of fishing regulations also required additional funds to hire and train game wardens, including plain-clothes officers who enforced compliance with the law prohibiting snagging. Other program costs included public relations and boater safety education.⁶⁷

The funds required to develop and maintaining the Great Lakes sport fishery paled in comparison to the larger economic, environmental, and social and cultural costs incurred. Commercial and subsistence fishermen paid a large portion of the price of the creation of the Great Lakes sport fishery. From 1965 to 1985 the Michigan Department of Conservation and its successor agency, the Michigan Department of Natural Resources (DNR), instituted sweeping changes in commercial fishing regulations. Numerous methods were employed to reduce the number of commercial fishermen and eliminate what remained of their political and economic influence. Lake trout (formerly the most abundant commercial species) and salmon were classified as game fish and were closed to commercial fishing. Convinced that commercial license holders who fished with gill nets were a threat to the sport fishery, fisheries chief Tody sought to reduce their numbers or eliminate them from Michigan waters. He favored trap-net gear over gill nets because the latter allegedly caught too many sport species as incidental catch.

The DNR decreased the number of commercial fishermen by adopting the concept of limited-entry fishing. This policy limited commercial licenses to fishermen who fished for more than fifty days in two of any of the three preceding years and met certain fishing income requirements. Later, the DNR introduced the concept of zone fishing, which required fishermen to use particular types of gear in particular geographical locations. Quotas were established, with each licensee assigned a portion of the Total Allowable Catch (TAC).

Commercial fishermen resisted the DNR's efforts to drive them off the Great Lakes. Claude Ver Duin, commercial fishing advocate and editor of *The Fisherman*, challenged the state's right to deny a fisherman the right to practice his trade or vocation because he is not "making enough money." He charged that the department's limited entry policy put hundreds of "little fisherman" out of business to benefit a small handful of well-financed operators who could afford to purchase the trap-net gear DNR officials claimed better protected fishery stocks.⁶⁸

The DNR dismissed allegations of unfairness made by Ver Duin and other commercial fishing advocates, although officials acknowledged that change "involving restrictions on one's livelihood is particularly hard to accept." Commercial fishing had to be eliminated or sharply curtailed, in the agency's estimation, because the industry was on a "collision course with sport fishermen" and was "inconsistent with optimum management."⁶⁹

Despite the legal challenges by commercial fishermen to the DNR's new policies, the number of commercial fishermen declined precipitously on Lake Michigan and Michigan's other Great Lakes waters during the 1970s. The number of commercial fishing license holders dropped from more than seven hundred in 1967 to less than two hundred by 1970. In 1971, James Brown, a Mackinac County prosecutor who was described as a "friend of the fishermen," calculated that in the previous three years, the DNR had "zoned down to less than 10 per cent of Michigan Great Lakes waters the area open to fishing operations."⁷⁰

Among the commercial fishing license holders who could not meet Michigan's ever tightening restrictions were American Indians. Howard Tanner, who returned

HELP PUT GILL NETTERS ON THE ENDANGERED SPECIES LIST



GILL NETTERS AT NORWOOD 8/11/78

JOIN THE S.G.N. ASSOCIATION

A NON-VIOLENT GROUP DEDICATED
TO STOP GILL NETTING.

The Stop Gill Netting Association was founded by sports fishermen in Traverse City, Michigan, in the late 1970s. The group hoped to stop American Indian tribes that had successfully reasserted their treaty fishing rights on Lake Michigan in a series of federal court cases, from using traditional gill nets. The photograph used in the poster was provided by "M. Keller," an employee of the Michigan Department of Natural Resources and an outspoken opponent of gill nets.

Courtesy of Michigan Department of Natural Resources, Great Lakes Research Station, Charlevoix, Mich.

to state government to head the Michigan DNR in 1975, acknowledged in an interview with historian Michael J. Chiarappa that the DNR's policy was so rigid it practically forced the lakeshore tribes to go to court to fight it.⁷ By 1979, in a

series of cases in U.S. District Court, lakeshore Indians had re-established their fishing treaty rights in Lake Michigan. Determined to block the tribes from exploiting fisheries resources, the Michigan DNR, the Michigan United Conservation Clubs, and other parties initiated a series of lawsuits against lakeshore tribes and the federal government.

Legal challenges were among the tamer responses to the federal court's affirmation of treaty rights fishing. In most of the communities on Lake Michigan, anti-Indian fishing sentiment was palpable and cars exhibited bumper stickers that said "Save a Trout; Spear an Indian." Indian fishermen not only feared retribution from law enforcement officials sympathetic to sport fishing interests but at worst, a growing tide of vigilantism. Convinced that tensions would become even more explosive, the U.S. District Court in 1985 ordered all parties to settle their differences in a Consent Order dictating the co-management of Lake Michigan's fisheries resources by state, tribal, and federal authorities.⁷²

An assessment of the economic and social costs of the creation of the Great Lakes sport fishery not only should include the destruction of the commercial and the subsistence fishery but also the unintended effects of sport fishing and leisure tourism. Historians Mansel Blackford and Hal Rothman are among a number of scholars who argue that tourism has been a two-edged sword—an economic blessing and a curse for local residents—in other natural resource rich areas of the United States, such as Hawaii, Alaska, and Nevada.

With the creation of the Great Lakes sport fishery, Tanner may not have stuck a "devil's bargain," in the words of Rothman. But he certainly helped to accelerate the rate of economic and social change in the cities and towns along the shore of Lake Michigan. Tourism related to sport fishing not only has brought traffic and congestion, but has contributed to rising real estate values that make it difficult if not impossible for wage earners and business owners of limited economic means to retain their land, especially if it is on or near the lakeshore. In an examination of the impact of sport fishing on local Native Americans, historian Robert Doherty concluded that tourism has "seldom helped long-term residents towards economic security. It merely hid them behind the façade of affluence. Northern Michigan may seem better off than it was thirty years ago, but only because newcomers moved in and pushed the former residents aside. This process, by which tourism reallocated resources, can be clearly seen in the development of the Great Lakes sport fishery."⁷⁴

The economic cost of the creation of the sport fishery also should be examined in relation to its environmental effects. The most obvious environmental problem was the annual "die-off" of salmon when Great Lakes tributary rivers and streams were fouled by thousands of dead and decaying salmon. One irate angler complained that if the DNR insisted "on stocking more of these living pollutants and adding to our already horribly fouled up ecology," it should "put 'em in a river already turned sewer."⁷⁵

During the 1980s, salmon and lake trout engaged in a destructive competition for forage food such as alewife. Bacterial kidney disease (BKD) became such a problem among undernourished salmon that both the Michigan and the

Wisconsin departments of natural resources reduced their stocking levels. Public health studies and warnings provided evidence of growing awareness of the potential health risks posed by ingesting Great Lakes fish, particularly fatty fish such as salmon.⁷⁶

The inability or unwillingness of Michigan conservation officials to anticipate or address the economic and environmental problems created by the salmon fishery hardly contributed to an amicable co-existence between the commercial, tribal, and sport advocates. Michigan pursued policies that recast lakeshore communities as places of struggle between different groups claiming fishery resources. Conflict over fisheries resources existed in Lake Michigan cities when commercial fishing was the focus of the state's Great Lakes fishing policy, but it took on a distinctively more confrontational and even violent overtone in the 1970s and 1980s, after sport fishing became the focus of Great Lakes fisheries management.

When the salmon fishery on Lake Michigan was in its heyday, the DNR enjoyed the enthusiastic support of sport fishing organizations such as the Michigan United Conservation Clubs and the Michigan Steelheaders. Yet friction between the DNR and sport fishermen soon emerged. Spoiled by fishing conditions that "had no parallel in the annals of sport fishing," sport fishermen lashed out against fisheries officials when rule or policy changes were proposed.⁷⁷ Differing among themselves about how the DNR should restore the quality of Great Lakes sport fishing, some defended the practice known as snagging—the use of a weighted hook to impale a fish anywhere on its body. Others, consumed by the desire to land large salmon, objected to the DNR's decision to reduce stocking levels to combat BKD. As early as 1971, DNR officials conceded that perhaps they had created a monster. As one argued, Great Lakes sport fishing had indeed brought about a "change in sport fishing of almost frightening proportions."⁷⁸

To be sure, not all the battles brought by the new fishery were detrimental. Historian Andrew Hurley recently has shown how residents in Gary, Indiana, including some former steelworkers, organized in support of stronger water pollution restrictions on U.S. Steel and other lakeshore manufacturers in order to protect the sport fishery.⁷⁹

To state officials, the new anti-pollution efforts were part of a larger triumph, the revitalization of dying regions. In 1968, Russell McKee, of the Michigan Department of Conservation, identified two Lake Michigan towns, Saugatuck and Fairport, as "[c]harming places to visit," but noted they were not the "most fruitful places in which to live and work." Unwilling or unable to link their economic and social problems to the postwar decline of manufacturing, shipping, shipbuilding, and other maritime trades and industries, McKee suggested that the causes of this "modern tragedy" were unknown. He wrote: "Doctors who studied this Great Lakes malaise included a small army of economists, sociologists, welfare leaders, legislators and, finally, conservationists. The sociologists documented the drain of lifeblood out of the patient. Economists urged development of industry. Welfare leaders called for more funds. Legislators provided school tax relief, and promoted local road construction. But as it turned out, the real help came from

conservationists—who came shining through with one of the most spectacular natural resource management victories ever seen in North America.”⁸⁰

The “conservationists who came shining through” the economic and environmental nightmare that was the Great Lakes during the late 1960s and early 1970s may have scored one of the “most spectacular natural resource management victories in North America,” but they failed to consider the long-term ramifications of their actions on the lake and those who derived their livelihood from it. Conservation officials such as Howard Tanner and Wayne Tody saw stocking a non-indigenous game fish as better policy from both an environmental and financial standpoint than working with lakeshore communities to rehabilitate aging maritime industries such as commercial fishing. By failing to aid lakeshore cities and towns in making their commercial fishing fleets more environmentally and economically responsible, Michigan contributed to the de-industrialization of its Great Lakes waterfront. The backers of the Great Lakes sport fishery, like other promoters of waterfront recreation and tourism nationwide, sought to rid lakeshore communities of the vestiges of industrial manufacturing and commerce. They also encouraged the abandonment of the Great Lakes as a food producing source and the destruction of an industry that historically fostered employment, commerce, and cultural linkages dating back to the region’s earliest Native inhabitants. The recent renewal of the 1985 U.S. District Court Consent Order requiring the Michigan DNR to share management authority with federal and tribal fisheries officials has demonstrated that it is possible for the cities and town on the shore of Lake Michigan to enjoy the benefits of commercial and tribal fisheries, along with the sport fishery to which it had given too exclusive attention for too long.⁸¹

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NOTES

Research for this article was completed as part of the “Fish for All” project co-directed by Michael J. Chiarappa and Kristin M. Szylvian and partially funded by the Great Lakes Fishery Trust. An earlier version was presented at the Urban History Association meeting in 2002. The author wishes to thank Michael Chiarappa, Mansel Blackford, Eric Sandweiss, and Joel Tarr for their ideas and suggestions and WMU graduate student Jeff Welc for research assistance. *Environmental History* editor Adam Rome, reader Margaret Beattie Bogue, and an anonymous reader also provided guidance in the revision process.

1. Dick Kirkpatrick, “The Coming Salmon Boom,” *National Wildlife* 6 (August 1968): 42. On Pacific salmon, see Joseph E. Taylor III, *Making Salmon: An Environmental History of the Northwest Fisheries Crisis* (Seattle: University of Washington Press, 1999). Coho salmon were among many non-indigenous species that invaded or were stocked in the

- Great Lakes. See Randy Eshenroder and Mary K. Burnham-Curtis, "Species Succession and Sustainability of the Great Lakes Fish Community," in *Great Lakes Fisheries Policy and Management: A Binational Perspective*, ed. William W. Taylor and C. Paola Ferreri (East Lansing: Michigan State University Press, 1999), 148-55; and Joseph H. Leach, Edward L. Mills, and Margaret R. Dochoda, "Non-Indigenous Species in the Great Lakes: Ecosystem Impacts, Binational Policies, and Management," in *ibid.*, 186-92.
2. Stewart Udall quoted in William O. Douglas, "Their Glory is in Danger," *Holiday* 43 (May 1968): 65. See "Dying Lake Michigan," *Newsweek* (13 November 1967): 108. Mauldin's "Dead Sea Scrolls" cartoon accompanies Jerry Chiappetta, "Great Lakes, Great Mess," *Audubon* 70 (May 1968): 30.
 3. E. P. Thompson, *Whigs and Hunters: The Origin of the Black Act* (New York: Pantheon Books, 1975).
 4. Edward D. Ives, *George Magoon and the Down East Game War: History, Myth, and Folklore* (Urbana: University of Illinois Press, 1988); Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves and the Hidden History of American Conservation* (Berkeley and Los Angeles: University of California Press, 2001); Mark Spence, *Dispossessing the Wilderness: The Preservation Ideal, Indian Removal, and National Parks* (New York: Oxford University Press, 1999); and Louis S. Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997).
 5. Peter J. Schmitt, *Back to Nature: The Arcadian Myth in Urban America* (1969; reprint, Baltimore: Johns Hopkins University Press, 1990.)
 6. Jacoby, *Crimes Against Nature*, 3.
 7. On recreational and tourism interests and natural resource allocation on the Great Lakes, see William Ashworth, *The Late, Great Lakes: An Environmental History* (Detroit, Mich.: Wayne State University Press, 1987), 122; Dave Dempsey, *Ruin and Recovery: Michigan's Rise as a Conservation Leader* (Ann Arbor: University of Michigan Press, 2001); Robert Doherty, *Disputed Waters: Native Americans and the Great Lakes Fishery* (Lexington: University of Kentucky Press, 1990), 63; Thomas R. Huffman, *Protectors of the Land and Water: Environmentalism in Wisconsin, 1961-1968* (Chapel Hill: University of North Carolina Press, 1994), 12-14.
 8. "Saulte Ste. Marie," Clarke Historical Library Picture File, Central Michigan University. See also U.S. Commission on Fish and Fisheries, *Report of the Commissioner for 1887*, Part XV (Washington, D.C.: U.S. Government Printing Office, 1891), 68; and Margaret Beattie Bogue, *Fishing the Great Lakes: An Environmental History, 1783-1933* (Madison: University of Wisconsin Press, 2000), 6, 76.
 9. On treaty fishing rights in northern Michigan, see Doherty, *Disputed Waters*, 7-37, 67-85. On tribal cases in the Pacific Northwest, see Daniel L. Boxberger, *To Fish in Common: The Ethnohistory of Lummi Indian Salmon Fishing* (Lincoln: University of Nebraska Press, 1989), 154-6, 163-4.
 10. Skip Duhamel interview in Michael J. Chiarappa and Kristin M. Szylyan, *Fish for All: An Oral History of Multiple Claims and Divided Sentiment on Lake Michigan*, (East Lansing: Michigan State University Press, 2003), 19-20. Original interview tapes and transcripts available at the Canonie Library, Michigan Maritime Museum, South Haven, Mich.
 11. The U.S. Commission on Fish and Fisheries estimated in 1884 that \$10,000 worth of fish was caught each year at the "breakwater at Chicago by men, women, and children who go out there in summer for a day's outing, nearly all of whom catch more or less fish." See U.S. Commission on Fish and Fisheries, *Report of the Commissioner for 1887*, 10. On sport fishing in the 1930s and 1940s, see Michigan Department of Conservation, Fish Division, "Commercial Fishing and Sport Trolling Licenses Issued for Use on the State of Michigan Waters of The Great Lakes," Commercial Fishing

- License File 75-34 B12 F25, Michigan State Archives, Lansing, Mich. See also "Sportsmen Versus Commercial Fishermen," *The Fisherman* 5 (November 1936): 2; "Activities on the Great Lakes," *The Fishing Gazette* 53 (April 1936): 27; Gilbert Larson, "Want a Big Fish? Go 'Deep Sea' Fishing in Michigan," *Michigan Conservation* 7 (August 1938): 9.
12. Bogue, *Fishing the Great Lakes*, 29-33. On the application of an informal management system known as traditional ecological knowledge among Newfoundlanders, see Barbara Neis, et al., "An Interdisciplinary Method for Collecting and Integrating Fishers' Ecological Knowledge into Fisheries Management," in *Fishing Places, Fishing People: Traditions and Issues in Canadian Small-Scale Fisheries*, ed. Dianne Newell and Rosemary E. Ommer (Toronto: University of Toronto Press, 1999): 215-38.
 13. John A. Scott, "A Review of the Productivity and Regulation of Michigan's Commercial Fisheries, 1870-1970," *Michigan Fisheries Centennial Report, 1873-1973*, Fisheries Report No. 6 (Lansing: Michigan Department of Natural Resources, April 1974), 79.
 14. Bogue, *Fishing the Great Lakes*, 139-41, 198, 280-1; Ashworth, *The Late, Great Lakes*, 112-22; and Theodora E. Colborn, et al., *Great Lakes, Great Legacy?* (Washington, D.C.: The Conservation Foundation and the Institute for Research on Public Policy, 1990): 1-74, 148-63.
 15. Helen Lee Foster, "Twenty-five Year Record is Reviewed," *Michigan Conservation* 15 (June 1946): 3-4, 11.
 16. "Menace of 'Trade Waste' in the Illinois River," *The Fishing Gazette* 36 (2 August 1919): 1216. See also Bogue, *Fishing the Great Lakes*, 139-41, 198, 280-1.
 17. Paul F. Kempter, [letter to] *Michigan Tradesman* no. 2674 (19 December 1934): 9.
 18. Gerald P. Cooper, "Fisheries Research," *Michigan Fisheries Centennial Report*, 145-6.
 19. The unofficial jurisdictional division was reportedly a result of an informal agreement between John Van Oosten, the head of federally funded Great Lakes Fisheries Investigations, and Frederick Westerman, the chief of the Fish Division of the Michigan Department of Conservation. See Howard Tanner interview, *Fish for All*, 22-23; and Stanford Smith interview, *Fish for All*, 21-22. See also Spencer Bower, "Great Lakes Fisheries," *Michigan Conservation* 19 (September/October 1950): 25. On the division of federal and state power, see Margaret Ross Dochoda, "Authorities, Responsibilities, and Arrangements for Managing Fish and Fisheries in the Great Lakes Eco-system," in *Great Lakes Fisheries Policy and Management*, 95-98. A WWII poster featuring brawny fishermen of unspecified ethnic origins pulling nets by hand on to a boat deck laden with fish indicated that for the duration at least, fishermen were "Assets to Victory," and not implicated in the depletion of fisheries resources. See U.S. Office of War Information, Poster No. 161. [n.d.].
 20. Dochoda, "Authorities, Responsibilities, and Arrangements," 101-6; The creation of the Great Lakes Fishery Commission followed numerous failed attempts at bi-national agreement on Great Lakes fisheries issues. See Margaret Beattie Bogue, "To Save the Fish: Canada, the United States, the Great Lakes, and the Joint Commission of 1892," *Journal of American History* 79 (March 1993): 1429-54.
 21. "Keystone in Conservation," *Michigan Conservation* 27 (July/August 1958): 3.
 22. In neighboring Wisconsin, relations between state and federal fisheries officials were not as antagonistic, even though the Department of Conservation began stocking salmon in its Great Lakes waters a short time after Michigan did. Unconvinced that commercial fishing had to be nearly eliminated in order to establish a successful sport fishery, Wisconsin decided to simultaneously manage the state's Great Lakes waters for commercial and sport fishing. See *Fish for All*, 636-40.
 23. W. Fenton Carbine, "One Answer for a Fishery," *Michigan Conservation* 29 (July/August 1960): 25-27. See also Dempsey, *Ruin and Recovery*, 120; Howard Tanner interview, *Fish for All*, 70.

24. Robert Archibald, *A Place to Remember: Using History to Build Community* (Walnut Creek, Calif.: AltaMira Press, 1999).
25. Lake trout was of greatest concern. Since it was closed to commercial fishing in Lake Michigan in 1965, the lake trout has increasingly been sought as a game fish. See Randy L. Eshenroder, "Socioeconomic Aspects of Lake Trout Rehabilitation in the Great Lakes," *Transactions of the American Fisheries Society* 116 (1987): 311. See also Michael J. Hansen, "Lake Trout in the Great Lakes: Basinwide Stock Collapse and Binational Restoration," in *Great Lakes Fishery Policy and Management*, 417-53.
26. "A Time for Concern," *Michigan Conservation* 24 (July/August 1955): 1.
27. Justin W. Leonard, "Sport Fishing in 1990," *Michigan Conservation* 28 (November/December 1959): 40.
28. Ibid.
29. Glenn G. Greg, "Men, Land, and Leisure," *Michigan Conservation* 36 (January/February 1967): 5.
30. Emphasis in original. See "Too Little and Too Late," *The Fisherman*, (November 1948), 5. See also Tom Kuchenberg, *Reflections in a Tarnished Mirror: The Use and Abuse of the Great Lakes* (Sturgeon Bay, Wis.: Golden Globe Publishing, 1978), 56.
31. "Adson Casey—Commercial Fisherman," *Michigan Conservation* 24 (July/August 1955): 15-18.
32. Ibid., 18; See front cover of *Michigan Conservation* 24 (July/August 1955).
33. See photograph accompanying Frederick Westerman, "The Great Lakes Whitefish," *Michigan Conservation* 27 (July/August, 1958): 22.
34. John Gray, "A Man, A Boat, An Era," *Michigan Conservation* 29 (July-August 1959), 22-26.
35. Leonard, "Sport Fishing in 1990," 34.
36. "People and Their Stories," *Michigan Conservation* 34 (March-April 1965): 1. For a sympathetic account of Tanner and the salmon program, see Dempsey, *Ruin and Recovery*, 119-23. Compare with Clifford Ross Gearhart, *Pity the Poor Fish, Then Man* (Au Train, Mich.: Avery Color Studios, 1987): 149, 200; Kuchenberg, *Reflections in a Tarnished Mirror*, 78, 146, 205; and Doherty, *Disputed Waters*, 109-17.
37. Howard A. Tanner, "Great Lakes Sport Fishing Frontier," *Michigan Conservation* 34 (November/December 1965): 6. The Department of Conservation publicly supported Tanner's assessment. Russell McKee, the head of public relations for the Department of Conservation, once observed that some lakeshore communities were so economically and socially depressed as a result of the collapse of commercial fishing, the only young people around were there to "visit grandparents." See Russell McKee, "Defeat of the Killer Eel," *Audubon* 70 (July 1968): 40.
38. On the impact of salmon fishing on fishing license sales, see David P. Borgeson, ed., Fish Management Report No. 4, *Status of Michigan's Fisheries Management, 1971* (Lansing: Michigan Department of Natural Resources, Fish Division, 1972), 4-6; Tanner, "Great Lakes Sport Fishing Frontier," 4.
39. Dempsey, *Ruin and Recovery*, 119-23.
40. John Van Oosten, "A New Immigrant Comes to Michigan," *The Fisherman* 5 (June 1936): 1; "Coho in the Round," *Michigan Conservation* 36 (September/October 1967): 18-19. See also Edward K. Schultz, "Three New Fish," *Michigan Conservation* 32 (March/April 1963): 33.
41. Wayne H. Tody, "100,000 Big Fish," *Michigan Conservation* 37 (September/October 1968): 27. See also Carbine, "One Answer for a Fishery," 25-27; Schultz, "Three New Fish," 33-34; and Kuchenberg, *Reflections in a Tarnished Mirror*, 73.
42. Wayne H. Tody, "The World's Finest Fishery?" *Michigan Conservation* 36 (May/June 1967): 4; David P. Borgeson and Wayne H. Tody, eds., *Status Report on the Great Lakes*

- Fisheries*, 1967, Fish Management Report No. 2 (Lansing: Michigan Department of Conservation, Fish Division, 1967), vii. The first one million eggs were provided by the Oregon Fish Commission in the fall of 1964. An estimated 850,000 coho were stocked in the spring of 1966. See W. C. Latta, "A History of the Introduction of Fishes in Michigan," *Michigan Fisheries Centennial Report*, 86-87; Wayne H. Tody and Howard A. Tanner, *Coho Salmon for the Great Lakes*, Fish Management Report No. 1 (Lansing: Michigan Department of Conservation, Fish Division, 1966), 1; Harry Westers and Thomas Stauffer, "A History of Fish Culture in Michigan," in *Michigan Fisheries Centennial Report*, 123-4; and David P. Borgeson, ed., *Coho Salmon Status Report*, Fish Management Report No. 3 (Lansing: Michigan Department of Natural Resources, Fish Division, 1970), 1, 5.
43. Jerry Chiappetta, "Salmon Succeed in Great Lakes," *Field & Stream* 71 (December 1966): 12, 71; Ben East, "Cohoes Coming Up," *Outdoor Life* 142 (August 1968): 20; Hank Babbitt, "A Boom and a Blunder on Lake Michigan," *Sports Illustrated* 27 (9 October 1967): 67, 70. See also Hank Babbitt and Dave Kitz, *Catching Coho! The Complete Guide to Freshwater Coho Salmon Fishing*, (Ann Arbor, Mich.: Sports World Publishing Company, 1968), 3, 187-207; Jerry Chiappetta, "The Coho Craze in Michigan," *Field & Stream* 72 (January 1968): 42, 103. See also McKee, "Defeat of the Killer Eel," 46.
 44. Chiappetta, "The Coho Craze," 42, 103.
 45. Borgeson, *Coho Salmon Status Report*, 5.
 46. A. J. McClane, "Salmon Potpourri," *Field & Stream* 75 (December 1970): 88.
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 52. "Coho Go-Go," 86.
 53. "The Fish that has them Hooked," 161. See also McClane, "Salmon Potpourri," 88; Babbitt and Kitz, *Catching Coho*, 33-60, 91-115; and Wynn Davis, "More on Coho," *Outdoor Life* 142 (July 1968): 64.
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57. Jean White, "Lake Michigan Fishing: No Shore Thing," *The Saturday Evening Post* 261 (September 1989): 86.
58. Richard J. Enger, "Grand Traverse Bay—Melting Pot for Gamefish," *Field & Stream* 79 (April 1974): 182-88.
59. Kirkpatrick, "The Coming Salmon Boom," 45; Babbitt, "A Boom and a Blunder on Lake Michigan," 67; Chiappetta, "The Coho Craze in Michigan," 103-5, 113; Vlad Evanoff, "The Coho Catches On," *Motor Boating* 124 (October 1969): 63, 107; Chiappetta, "Great Lakes Salmon," 92; East, "Cohoes Coming Up," 20; Davis, "More on Coho," 64; and Babbitt and Kitz, *Catching Coho*, 2.
60. East, "Cohoes Coming Up," 20. See also Borgeson and Tody, eds., *Status Report on Great Lakes Fisheries, 1967*, 32; Chiappetta, "The Coho Craze in Michigan," 113.
61. Davis, "More on Coho," 64, 66.
62. Borgeson, ed., *Coho Salmon Status Report, 1970*, 17.
63. Stan Lievense interview, *Fish for All*, 440.
64. Charles P. Loomis, "Wildlife and Recreation; The Past and the Future," *Michigan Conservation* 24 (May/June 1955): 2-7; James T. McFadden, "Blueprint for Better Fishing," *Michigan Conservation* 32 (July/August 1964): 2-7; William T. McGraw, "For the Fun of it," *Michigan Conservation* 34 (January/February 1965): 12; Greg, "Men, Land, and Leisure," 2-7; and Luther J. Carter, "Lake Michigan: Salmon Help to Redress the Balance," *Science* 161 (August 1968): 551-5; quote, 555.
65. Ken Schultz, "The Great Great Lakes," *Field & Stream* 87 (February 1983): 79; "Coho Madness," 63.
66. In 1941, there was only one public fishing site directly on Lake Michigan. See Daniel F. Bosma, "Public Fishing Sites' First Year," *Michigan Conservation* 10 (February/March 1941): 3, 11. The Department of Conservation was called upon to improve public access to state lands and waters and build fishing piers and boat docks for the 45 percent of visitors to the state's public recreation areas who planned to go fishing as early as 1951. See Nicholas V. Olds and Harold W. Glassen, "Do States Still Own Their Game Fish?" *Michigan Conservation* 20 (July/August 1951): 9. The Department of Conservation looked to the Michigan Waterway Commission to improve public access to the Great Lakes. See Borgeson and Tody, eds., *Status Report on Great Lakes Fisheries, 1967*, 28, 33.
67. Borgeson and Tody, eds., *Status Report on Great Lakes Fisheries, 1967*, 32; Gordon Zuverink interview, *Fish for All* 468-469.
68. In 1970, Roy Jensen, of the Michigan Fish Producers' Association, responded to the DNR's claim that Michigan residents no longer derived a livelihood from fishing the Great Lakes with a report finding that some eighty-seven persons in Fairport, Michigan, made their living off of fishing. Dozens of other people residing in this remote geographical area were employed in related businesses such as the fabrication of wooden fish boxes. These people constituted a large share of the adult population. See "Fish Consumers Ignored, Says Fish Producers," [n.l.] 17 March 1970, Garden Historical Society Commercial Fishing Scrapbook (hereafter GHSCFS), Garden Historical Society, Garden, Mich. On Lake Erie commercial fishing, see Timothy C. Lloyd and Patrick B. Mullen, *Lake Erie Fishermen: Work, Tradition, and Identity* (Urbana: University of Illinois Press, 1990); Claude Ver Duin quoted in Kuchenberg, *Reflections in a Tarnished Mirror*, 89.
69. Borgeson, ed., *Status Report on Great Lakes Fisheries, 1971*, 31.
70. "Fish Consumers Ignored, Says Fish Producers"; DNR Commission to Hear Fishermen," [n. l.] 12 November 1971, GHSCFS.
71. Howard Tanner interview, *Fish for All*, 641.

72. On treaty fishing rights opposition, see Grand Traverse Area Sportsfishing Association, "The Treaty of 1836 and the Fishing Case" [n.l.] 17 February 1976, CRSS, Charlevoix, Michigan; Kuchenberg, *Reflections in a Tarnished Mirror*, 123-5; Barry L. Levine, "Indian Fishing Rights," *The Muskegon Chronicle*, 15 September 1982, CRSS; ; [Nancy Kida], "The Gill Net and State Policy," 17 March 1984, Typewritten Report, Mackley Public Library, Muskegon, Mich.; "State Asks U.S. Court to Halt Indian Fishing," *Lansing State Journal*, 29 April 1988, CRSS; "Gill-Netting Limit Sought in Grand Traverse," *Detroit News*, 29 April 1988; Larry Sawicki, "As I See It ...," *The Sport Fisherman's Friend* (November 1997); "Discontent is Being Shared Among Traverse Bay Sports Fishermen," *The Sport Fisherman's Friend*, (November 1997); "A Boating Hazard is Being Created in Grand Traverse Bay and Lake Michigan," *The Sport Fisherman's Friend* (November 1997); Lawrence J. Thornhill, "An Invasion of Gill Nets Could be Awaiting the Great Lakes," *The Sport Fisherman's Friend* (November 1997); and Larry Sawicki, "Some Blame Should Fall on Our Governor's Office," *The Sport Fisherman's Friend*, (November 1997).
73. Mansel Blackford, *Fragile Paradise: The Impact of Tourism on Maui, 1959-2000* (Lawrence: University of Kansas Press, 2001) and Hal Rothman, *Devil's Bargain: Tourism in the Twentieth-Century American West* (Lawrence: University of Kansas Press, 1998).
74. Doherty, *Disputed Waters*, 58.
75. John McLenithan, "Letters to the Press," [n.l.] 2 March 1970, GHSCFS. Some sportsmen opposed the stocking of the Whitefish River because the salmon preyed upon indigenous sport fish. See Don Hoenshell, "Governor Asked to Help Save State's Commercial Fishing Industry," [n. l.] 11 November 1971, GHSCFS.
76. Lyle Teskie interview, *Fish for All*, 443; Don Nichols interview, *Fish for All*, 442; and Richard Stevenson interview, *Fish for All*, 412.
77. Borgeson, ed., *Status of Michigan's Fisheries Management*, 13.
78. *Ibid.*, 14. See also Ben East, "Battle Over Salmon Snagging," *Outdoor Life* 155 (January 1975): 50-51.
79. Andrew Hurley, *Environmental Inequalities* (Chapel Hill: University of North Carolina Press, 1995), 92-93.
80. McKee, "Defeat of the Killer Eel," 40.
81. Russell W. Brown, Mark Ebner, and Thomas Gorenflo, "Great Lakes Commercial Fisheries: Historical Overview and Prognosis for the Future," in *Great Lakes Fisheries Policy and Management*, 324-30, and C. Paola Ferreri, William Taylor, and John M. Robertson, "Great Lakes Fisheries Futures: Balancing the Demands of a Multijurisdictional Resource," in *ibid.*, 539-48. See also H. John Heinz Center for Science, Economic, and the Environment, *Fishing Grounds: Defining a New Era*, (Washington, D.C., and Covello, California: Island Press, 2000).