Swimming Upstream: Trying to Enforce the 1992 North Pacific Salmon Treaty

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NOTES

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Kelly R. Bryan*

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Introduction

In February of 1992, the United States signed the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean (the 1992 North Pacific Salmon Treaty), an international agreement that prohibits

fishing for salmon on the high seas of the North Pacific Ocean. The United States had pushed for such a ban on high seas salmon fishing for decades.2

Salmon are an anadromous species, meaning they are born in fresh waters, migrate to the ocean for most of their lives, and later return to fresh waters to spawn.3 States-of-origin for anadromous fish want to receive the “full social, economic and recreational benefits” from salmon bred in their territory.4 Problems arise when the salmon migrate into the high seas; any state’s fishing vessel can then harvest any state-of-origin’s resource. Such high seas fishing is inefficient.5 Since salmon migrate back to the coasts upon reaching maturity, salmon caught on the high seas are not yet fully grown and do not produce the highest possible yield for each fish.6 High seas fishing also multiplies the problems associated with management programs for salmon stocks.7 Coastal states create and implement conservation plans for their own salmon stocks, such as enforcing quotas and restricting the dates when fishing is allowed. On the high seas, however, salmon from different states-of-origin mingle and are difficult to distinguish. Therefore, high seas catches of salmon from different states-of-origin interfere with the management efforts of those states.

In the United States, the fishing industry has long played an important role in the economies of northwest states such as Alaska, Washington, Oregon, and Idaho.8 The U.S. government has consistently maintained that high seas fishing for anadromous species is “irrational” because it interferes with coastal management and conservation efforts.9 In accordance with this logic, neither Canada, Russia, nor the United States has maintained or supported a high seas salmon fleet; Japan was the only sig-

4. Letter of Submittal, from Dept. of State, accompanying 1992 North Pacific Salmon Treaty, supra note 1, at vi [hereinafter Dept. of State Letter]. A state-of-origin is the country containing the inland stream where an anadromous fish is hatched.
5. Sathre, supra note 2, at 746. A 1980 study estimated that U.S. inland catches of chinook salmon would have been 6.5 times greater than catches on the high seas if the salmon had grown to maturity and returned to the stream of their birth. Id.
6. Id.
7. Id.
9. Dept. of State Letter, supra note 4, at v. Unregulated fishing would disrupt conservation programs, such as quota systems, thereby depleting salmon populations and destroying the industry for all fishermen, both from the coastal country and on the high seas.
The new treaty prohibits high seas salmon fishing, thereby conserving salmon stocks for the coastal countries to fish within their 200-mile exclusive economic zones and preserving the benefits of this natural resource for states-of-origin.\textsuperscript{11}

The salmon fishing industry generates hundreds of millions of dollars for the Pacific Northwest every year.\textsuperscript{12} Thousands of people are employed on the water fishing for salmon, while thousands more people are employed on land in the processing and distribution of salmon.\textsuperscript{13} Recreational salmon fishing also brings hundreds of millions of dollars to the area; many towns base their entire economies on the salmon industry.\textsuperscript{14} Each year, federal and state governments spend over $300 million to maintain and improve salmon runs in the Pacific Northwest.\textsuperscript{15}

In addition, salmon play a large role in the history and traditions of the Pacific Northwest. The cultures of many Northwest Indian tribes center on salmon both as an essential feature of their diet and as a central element of their religion.\textsuperscript{16} Indian treaties regarding fishing rights have been active since they were negotiated in the 1850s.\textsuperscript{17} "Because of their continuing importance to the sport, commerce, culture, and identity of the region, anadromous fish may rightly be considered the Pacific Northwest's most important natural resource—just as they were a century and a quarter ago . . . ."\textsuperscript{18} The 1992 North Pacific Salmon Treaty is an attempt to protect this natural resource and to secure its benefits for states-of-origin.

This Note will examine the enforcement provisions of the 1992 North Pacific Salmon Treaty. These provisions fall into two major categories: enforcement at sea and enforcement on land. To combat poaching, salmon-producing states in the North Pacific have traditionally directed their efforts toward ocean patrols that stop illegal fishermen on the high seas.\textsuperscript{19} The 1992 North Pacific Salmon Treaty maintains these traditional ocean enforcement techniques and also introduces new methods of end-
ing trade in illegally caught salmon through signatory legislation and regulatory programs that oversee the salmon market. One of these market programs requires certificates-of-origin for all signatory salmon exports to authenticate legally caught salmon. With a coordinated effort by the signatory countries, on-land market enforcement techniques will prove to be a valuable addition to international regulation of North Pacific salmon stocks.

Part I of this Note recounts the history of the fishing industry and past fishing treaties of the North Pacific from the perspectives of both North American-Japanese relations and Russo-Japanese relations. Part II describes the new provisions of the 1992 North Pacific Salmon Treaty and highlights its differences from the previous treaty. In part III, this Note examines the problem of illegal salmon fishing and related issues. Part IV explores the enforcement provisions of the Treaty, both at sea and on land. A program to enforce this treaty through the market will work to fill the gaps in enforcement left by ocean patrol methods; however, such a program will be ineffective without a concerted effort by the signatories to establish and maintain it.

I. History of Fishing Agreements in the North Pacific

A. North American-Japanese Relations

The waters off of the Alaskan coast offer one of the world's richest fisheries. The first American salmon canneries opened in Washington and Oregon in the 1860s. Alaskan canning started in 1878 and soon led the world's markets by producing more than six times the volume of salmon than all the other states combined. The fisheries were the backbone of the Alaskan economy.

In the 1930s, the Japanese began sending fishing boats into North American waters, specifically the Bristol Bay area of Alaska. Although the Japanese government claimed that it had sent the vessels to conduct a "scientific survey," the fishing vessels involved in the expedition managed to catch some salmon as well. At that time, American fishermen were constrained by the White Act of 1924, which limited salmon catches to fifty percent of the available fish in order to maintain the size of the stock.


21. TOMASEVICH, supra note 20.

22. Id.; CARL I. WICK, OCEAN HARVEST 11 (1946).


24. Id.; WICK, supra note 22, at 11-16.

25. LEONARD, supra note 23, at 3-4.


Therefore, the suspicion that the Japanese were taking salmon in disregard of the laws that restricted American fishermen multiplied the resentment already present in the industry against the Japanese.\textsuperscript{28}

After the U.S. State Department issued a statement to the Japanese government on the subject, Japan and the United States came to a "gentlemen's agreement" whereby Japan stopped its "scientific survey" and refused to license its citizens to fish in the Bristol Bay area.\textsuperscript{29} This did not resolve the dispute, however, and negotiations continued until they were interrupted by World War II. Negotiations resumed once again after the war in 1946.\textsuperscript{30} The first success finally came in 1952 with the signing of the International Convention for the High Seas Fisheries of the North Pacific Ocean (1952 North Pacific Convention).\textsuperscript{31}

The 1952 North Pacific Convention bound the United States, Canada, and Japan to a new concept in fisheries regulation: abstention.\textsuperscript{32} The Convention allowed states-of-origin the full economic benefit of fish resources that thrived as a result of their research and regulation,\textsuperscript{33} while it compelled other states to abstain from fishing those stocks unless the state-of-origin could not fish up to the maximum sustainable yield.\textsuperscript{34}

The original Convention imposed abstention upon Japan in waters east of 175 west longitude,\textsuperscript{35} but research soon uncovered that many North American salmon migrate west of that line.\textsuperscript{36} The Japanese continually resisted attempts to renegotiate the treaty to protect more North American salmon, but the parties finally amended the treaty in 1978, mov-

\begin{thebibliography}{36}
\bibitem{28} Leonard, \textit{supra} note 23, at 3.
\bibitem{29} Jessup, \textit{supra} note 26, at 132-33.
\bibitem{31} 1952 North Pacific Convention, \textit{supra} note 19. The North Pacific Convention entered into force on June 12, 1953. \textit{Id}.
\bibitem{33} Parker, \textit{supra} note 32.
\bibitem{34} 1952 North Pacific Convention, \textit{supra} note 19, art. IV; Van Cleve & Johnson, \textit{supra} note 32, at 34. The 1952 North Pacific Convention created the International North Pacific Fisheries Commission to conduct research of regional fish stocks. 1952 North Pacific Convention, \textit{supra} note 19, arts. II-III. The Commission made the determination of whether a fish species was being fished to the maximum sustainable yield, thereby qualifying it for abstention by foreign fishers. \textit{Id.} art. III. Maximum sustainable yield is a mathematically calculated level of harvest that maintains the optimum productivity of a fishery over time. \textit{See} Van Cleve & Johnson, \textit{supra} note 32, at 19-23.
\bibitem{35} 1952 North Pacific Convention, \textit{supra} note 19, Protocol.
\bibitem{36} Parker, \textit{supra} note 32, at 24; \textit{Senate Hearing} \textit{supra} note 30. In some years, the Japanese take of Alaskan salmon may have exceeded the North American inland catches; Alaskan fisheries may have lost up to ten million fish per year. \textit{Id.} at 18.
\end{thebibliography}
ing the abstention line approximately 500 miles to the west. This protected more North American salmon on the high seas from Japanese fishing, but not all. Nevertheless, the amended treaty was one step closer to the U.S. goal of a ban on Japanese directed fishing of North American stocks.


B. Russo-Japanese Relations

The Japanese began salmon fishing along the Siberian and Kamtchatkan coasts in the early seventeenth century. After the Russo-Japanese War, the Russians conceded fishing rights to the Japanese by the Treaty of Portsmouth in 1905. After the Russian Revolution, the Soviets reaffirmed these Japanese fishing rights through continual renegotiations until the end of World War II.

In 1956, the U.S.S.R. prohibited fishing for salmon on the high seas without its permission, thereby claiming control over high seas stocks of Soviet origin. In 1989, the Soviets refused to allow the Japanese to fish for Soviet-origin salmon on the high seas after 1992. At the same time, the Soviets put forward a draft of a new multilateral conservation agreement. The United States, Canada, and Japan matched this effort, and in 1990 and 1991, representatives of the four countries met and negotiated a

37. *Senate Hearing*, supra note 30; 1952 North Pacific Convention, *supra* note 19, Amended Protocol. The new treaty moved the abstention line from 175 west longitude to 175 east longitude. *Id.* art. XI.


40. *Id.* at 18.


42. 1952 North Pacific Convention, *supra* note 19, Amended Annex, para. 1; Sathre, *supra* note 2, at 743.

43. PARKER, *supra* note 32, at 23.


45. PARKER, *supra* note 32, at 23; *see, e.g.*, LEONARD, *supra* note 23, at 27-34. Fishery rights were a symbol of the political power struggle in northeast Asia. *Id.* at 34.

46. Burke, *supra* note 2, at 130-31 n.156.

47. Dept. of State Letter, *supra* note 4, at vi.

48. *Id.*
new convention to conserve anadromous stocks in the North Pacific.49

C. Customary International Law and Related Issues

Traditionally, states had absolute control over their territorial seas, which today, under customary international law, extend twelve miles from the shoreline of each state.50 States could either bargain away those exclusive rights through international agreements, or they could monopolize the available resources.51 However, states could not exercise their jurisdiction on the high seas, which were defined as any waters outside of the territorial seas.52 Nations respected freedom of the high seas, especially for fishing.53

In the past few decades, that view has changed. All states-of-origin for salmon agree that there is no longer a right to fish for salmon on the high seas.54 Instead, nations wanting to fish salmon stocks that originate in another state must first obtain permission from the state-of-origin.55

The consensus that there is no longer a right to fish for anadromous stocks on the high seas began to develop among states-of-origin in 1976, when the United States unilaterally created a 200-mile Fishery Conservation Zone (FCZ).56 In the Fishery Conservation and Management Act

49. Id. The Russian Federation, rather than the U.S.S.R., was the signatory to the new North Pacific Salmon Treaty because it was signed in 1992, after the dissolution of the Soviet Union. The other signatories recognized the Russian Federation as the proper party to the treaty. Senator Murkowski expressed this acceptance at the hearing before the Committee on Foreign Relations regarding the 1992 Treaty:

[The treaty] recognizes the extremely important role of the Russian federation [sic] as a producer of wild Pacific salmon and makes the federation [sic] a full partner in this new conservation enterprise. I think it is particularly noteworthy, Mr. Chairman, that we had the President of the Russian Republic, President Yeltsin, before us today.

Senate Hearing, supra note 30, at 2.

50. See United Nations Convention on the Law of the Sea, arts. 2-3, U.N. Doc. A/CONF.62/122 (1982), reprinted in 21 I.L.M. 1261 (1982) [hereinafter UNCLOS]; Shigeru Oda, International Control of Sea Resources 13 (1963). The reach of the territorial sea has been an evolving issue in international law. In the early twentieth century, some nations challenged the traditional three-mile limit and extended their territorial sea to 12 miles. Id. at 15-20. In 1945, only two nations, or 5% of total coastal or island nations, claimed territorial seas measuring twelve miles in breadth. By 1979, seventy-six nations, or 58% of all coastal nations, claimed twelve-mile seas. Finally by early 1989 a total of 108 nations, or 75% of all nations, were claiming territorial seas of twelve miles breadth. The twelve-mile sea was thus viewed by a majority of nations as an appropriate replacement for the "retiring" three-mile limit.


52. Id.

53. Id.

54. Burke, supra note 2, at 118.

55. Id.


(FCMA), the United States professed to have "exclusive management authority" over all fish within 200 miles of its coastlines and over any anadromous fish of American origin, wherever they were on the high seas.\(^{57}\)

The U.S.S.R., Japan, and Canada, the other major states-of-origin for North Pacific salmon, each created their own 200-mile FCZs in 1977.\(^{58}\)

A state-of-origin claim of exclusive management authority over fish does not prevent fishing by other nations. Rather, it requires nations to obtain permission from the state-of-origin to fish those stocks. The United States has negotiated several bilateral agreements granting permission to fish within the U.S. fishery conservation zone.\(^{59}\) Japan and the U.S.S.R. negotiated Governing International Fishery Agreements (GIFAs) with the United States,\(^{60}\) while the 1985 Pacific Salmon Interception Treaty governs fishing rights between the United States and Canada.\(^{61}\)

The right to fish for salmon on the high seas continued to erode when the United Nations opened its Convention on the Law of the Sea (UNCLOS) for signature in 1982.\(^{62}\) Until it came into force on November 16, 1994, the United States recognized the non-seabed provisions of UNCLOS as customary international law.\(^{63}\) In fact, UNCLOS is substan-


\(^{58}\) Hayashi, supra note 56, at 349.

\(^{59}\) Kindt, supra note 56, app. III, at 45.


\(^{62}\) UNCLOS, supra note 50. One hundred and fifty-nine nations have signed the Convention, but it was only in November of 1993 that the required sixty-ninth nation ratified it. Steven Greenhouse, U.S. Aides Report Compromise on Sea Mining, N.Y. Times, Mar. 10, 1994, at A10. The Convention came into force on November 16, 1994, one year after ratification by the required 60 signatories. Bruce Clark, Law of the Sea Promises Many Disputes, Fin. Times, Nov. 16, 1994, at 6.

\(^{63}\) Senate Hearing, supra note 30, at 13. The United States did not sign the Convention in 1982 because of objections to part XI regarding deep seabed mining. Id.

On July 28, 1994, the United Nations adopted an agreement that amended part XI. The United States, along with 44 other nations, signed the agreement. Testimony of Ambassador David A. Colson, Deputy Assistant Secretary of State for Oceans, Before the Senate Comm. on Foreign Relations 1, Aug. 11, 1994, available in LEXIS, News Library, Curnws File (hereinafter Colson Senate Testimony).

The original Convention established a global seabed mining consortium designed to distribute proceeds to poorer nations. Part of these proceeds were royalties collected from the mining companies of industrialized nations, such as the United States. Greenhouse, supra note 62. "Under the new version of the treaty, technology does not have to
tially the same as the uncodified customary international practice regarding anadromous fish and fishing on the high seas. However, the Convention abandoned the concept of 200-mile Fishery Conservation Zones (FCZs) for that of 200-mile Exclusive Economic Zones (EEZs). Within the EEZs, coastal states have authority over more than just fishing rights—all "natural resources, whether living or non-living" within the EEZ fall under the control of the coastal state. The United States adopted its 200-mile EEZ in 1983.

Article 66(1) of UNCLOS grants states-of-origin "primary interest in and responsibility for" anadromous stocks. Article 66(3) (a) states that nations may fish for anadromous stocks only in areas landward of the 200-mile EEZ. High seas fishing (beyond the EEZ) requires negotiation with the state-of-origin, which has responsibility for conservation measures. In effect, high seas fishing must be acceptable to the state-of-origin, and it is susceptible to restrictions necessary for conservation.

Article 66(3) (b) creates an exception to the foregoing provisions by requiring states-of-origin to consider any "economic dislocation" that may occur by virtue of a ban on high seas fishing for anadromous species. Japanese claims of economic hardship prompted this exception. Consequently, states-of-origin following UNCLOS agreed to allow Japan to continue high seas fishing until it could phase out the practice. Knowing that it could not rely for long on its tenuous argument of economic hardship, Japan successfully completed its phase-out in 1991. Therefore, Japan can no longer rely on the economic dislocation exception and must

be shared, the U.N.'s oversight role has been reduced, and the United States can veto treaty decisions of which it disapproves." A Sea Change; The United States Finally Will Sign a Much-Disputed Treaty, PITTSBURGH POST-GAZETTE, Aug. 22, 1994, at B2. However, commercial seabed mining is not feasible for at least another 15 years. U.N. Amends Seabed Law, WASH. Post, July 29, 1994, at A28.

The U.S. Senate is now considering ratifying UNCLOS. See Colson Senate Testimony, supra. If the Senate does ratify the Convention, the United States will then "accede" to and be bound by the Convention without actually becoming a signatory. George Moffett, U.S. Accepts Revised Sea-Mining Rules in Controversial Sea Treaty, SAN DIEGO UNION-TRIB., July 29, 1994, at A-20. However, Jesse Helms (R.-N.C.), the new chairman of the Senate Foreign Relations Committee, has expressed his opposition to UNCLOS. Evans & Novak (CNN Broadcast, Nov. 19, 1994, Transcript #244), available in LEXIS, News Library, Curnws File.

64. Burke, supra note 2, at 118.
65. UNCLOS, supra note 50, arts. 55, 56.
66. McLean & Sucharitkul, supra note 56, at 492.
67. UNCLOS, supra note 50, art. 66.
68. Id. art. 66(3)(a).
69. Id.
70. Id. art. 66(1).
71. Burke, supra note 2, at 105.
72. UNCLOS, supra note 50, art. 66(3)(b).
73. Senate Hearing, supra note 30, at 4-5.
74. See id. at 5 ("The vision of the 1982 Law of the Sea Convention was to phase this fishery out. Japan has done so, knowing that it could not well rely for long on a tenuous argument.").
75. Id. at 7; Salmon Conservation Pact To Be Signed Tuesday in Moscow, KYODO NEWS INT'L, Feb. 17, 1992, available in LEXIS, News Library, Intl File. The Japanese salmon
follow the customary international law ban on high seas fishing for anadromous species.

II. The New Treaty: Changes from the Old Treaty

The old 1952 North Pacific Convention and its amendments left many gaps in the administration of salmon conservation efforts. First, it permitted salmon fishing on the high seas west of a certain longitude line. This limited abstention policy was ineffective for the purposes of salmon conservation. Second, the North Pacific had two separate regulatory regimes: the 1952 North Pacific Convention between the United States, Canada, and Japan, and a separate agreement between the Soviet Union and Japan. Third, although the international body overseeing the operation of the Convention made invaluable contributions in marine research, it did not sufficiently develop and implement enforcement measures for the Convention. Lastly, the Convention confined its signatories' enforcement power to apprehension at sea and did not provide for enforcement measures in the marketplace.


A. A Ban on High Seas Salmon Fishing

The most important provision of the 1992 North Pacific Salmon Treaty is its complete ban on high seas salmon fishing. The ban extends across the North Pacific Ocean and its adjacent seas north of 33 degrees latitude and outside the signatories' 200-mile EEZs along their coastlines.

The United States tried to negotiate a ban on high seas fishing with Japan for decades, but the 1992 North Pacific Salmon Treaty was the first success. One reason for Japan's recent flexibility was its new perception of itself as a coastal producer of salmon. Japan began to worry

76. 1952 North Pacific Convention, supra note 19, Protocol.
77. Id.
78. See part I.B.
79. 1952 North Pacific Convention, supra note 19, art. III.
80. Id.
81. 1992 North Pacific Salmon Treaty, supra note 1. The treaty was negotiated with the Soviet Union, but the other signatories agreed to replace the U.S.S.R. with the Russian Federation. Id. at vi. See supra note 49.
82. See 1992 North Pacific Salmon Treaty, supra note 1, art. III; Senate Hearing, supra note 30, at 1; Dept. of State Letter, supra note 4, at vi. The treaty prohibits catches of anadromous fish, which includes steelhead trout as well as the different species of salmon. See Senate Hearing, supra note 30, at 2, 6, 10, 16, 19.
83. 1992 North Pacific Salmon Treaty, supra note 1, art. I.
84. See Sathre, supra note 2, at 745; Burke, supra note 2, at 130-31 n.156.
85. Senate Hearing, supra note 30, at 5, 7.
about other fishing nations, such as North and South Korea, catching Japanese native salmon on the high seas.\textsuperscript{86} In order to prevent other nations from taking its own resources, Japan had to work with the other major producers of salmon to send a clear message that high seas fishing for anadromous stocks is unacceptable.\textsuperscript{87}

B. The Russian Federation: A New Party

The 1992 North Pacific Salmon Treaty saw the addition of the Russian Federation to the Canadian, Japanese, and American conservation efforts in the North Pacific.\textsuperscript{88} The thawing of relations between the U.S.S.R. and the United States in the late 1980s led to negotiations regarding North Pacific fishing rights, including a Soviet proposal for a multilateral North Pacific salmon agreement.\textsuperscript{89}

The resulting 1992 North Pacific Salmon Treaty was an integration of Soviet conservation efforts with the existing 1952 North Pacific Convention between Japan, Canada, and the United States.\textsuperscript{90} The new treaty includes the four major states-of-origin of salmon stocks.\textsuperscript{91} There is now only one coordinated international regime regulating the fishing of anadromous stocks in the North Pacific.

C. Creation of the NPAFC

The 1992 Treaty creates a new international body to oversee oceanic research and international cooperation on fishing issues.\textsuperscript{92} Named the North Pacific Anadromous Fish Commission (NPAFC), the organization replaces the International North Pacific Fisheries Commission (INPFC), which operated under the 1952 North Pacific Convention.\textsuperscript{93} The INPFC's most significant contribution was its scientific research in the fisheries—its data was important in the negotiation of agreements such as the new 1992 North Pacific Salmon Treaty.\textsuperscript{94} Although the NPAFC will continue the research and information exchange begun by the INPFC, the NPAFC differs in four significant aspects.

First, since the new treaty prohibits high seas fishing, the NPAFC will not have to oversee and control Japanese salmon catches on the high seas, assuming its compliance with the treaty.\textsuperscript{95} Second, the Russian Federation will now contribute to the research and enforcement efforts of the Com-

\begin{itemize}
  \item \textsuperscript{86} \textit{Id.}
  \item \textsuperscript{87} \textit{Id.}
  \item \textsuperscript{88} \textit{See} 1992 North Pacific Salmon Treaty, \textit{supra} note 1; 1952 North Pacific Convention, \textit{supra} note 19. The Soviets were already active in conservation efforts through a bilateral process with Japan. \textit{Senate Hearing, supra} note 30, at 6.
  \item \textsuperscript{89} \textit{Senate Hearing, supra} note 30, at 5, 19.
  \item \textsuperscript{90} \textit{Id.} at 6, 19.
  \item \textsuperscript{91} \textit{Id.} at 6.
  \item \textsuperscript{92} 1992 North Pacific Salmon Treaty, \textit{supra} note 1, arts. VIII-IX.
  \item \textsuperscript{93} \textit{Senate Hearing, supra} note 30, at 27; 1952 North Pacific Convention, \textit{supra} note 19, arts. II-IV.
  \item \textsuperscript{94} \textit{Senate Hearing, supra} note 30, at 17.
  \item \textsuperscript{95} \textit{Id.} at 27.
\end{itemize}
mission. Third, the NPAFC will coordinate enforcement efforts among the four signatories, including the development of a common schedule of penalties for treaty violations.96 Finally, the Commission will also formulate a certificate-of-origin program to halt trafficking in illegally caught salmon.97

D. Enforcement Provisions

Although the new treaty’s enforcement provisions are modeled after those of the 1952 Convention, there are some modifications that give signatories more power to stop illegal salmon fishing.98 Signatories who find vessels fishing illegally on the high seas may bring those boats into the enforcing country’s ports and turn the violators over to the appropriate authorities in their home country for prosecution.99 Also, the new treaty prohibits trafficking in illegally caught salmon100 and the refFlagging of boats under a nonsignatory country’s flag to avoid the ban on high seas fishing.101

III. The Problem: Illegal Salmon Fishing

Illegal salmon fishing on the high seas spawned a highly lucrative black market for salmon products.102 In 1989, an undercover sting operation resulted in an offer by a Tokyo-based company to sell twenty-four million pounds of salmon illegally caught by Taiwanese fishermen.103 The sale would have been worth between $36 million and $48 million.104 “The money is comparable to the drug business . . . [and] the fish don’t cost anything, so it is almost pure profit.”105

Illegal fishing issues generally fall into two categories: salmon fishing by nonsignatories to the 1992 North Pacific Salmon Treaty and the refFlagging of signatory nations’ ships to nonsignatory nations. Similar problems arose in a related controversy regarding the use of drift nets by commercial fishermen.

A. Nonsignatory Fishing

Fishing fleets from nonsignatory countries that take treaty-protected salmon from the high seas pose a problem for signatory countries, which are prohibited from fishing those areas. However, although nonsignato-

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96. Id. at 11, 27; 1992 North Pacific Salmon Treaty, supra note 1, art. IX(3).
97. Senate Hearing, supra note 30, at 13-14, 27; 1992 North Pacific Salmon Treaty, supra note 1, art. IX(7).
98. Senate Hearing, supra note 30, at 25.
99. 1992 North Pacific Salmon Treaty, supra note 1, art. V. See also discussion infra part IV.A.
100. 1992 North Pacific Salmon Treaty, supra note 1, art. III(3). See also discussion infra part III.A.
101. 1992 North Pacific Salmon Treaty, supra note 1, art. IV(3). See also discussion infra parts III.B, IV.B.
102. Campbell, supra note 15.
103. Id.
104. Id.
105. Id.
ries are not bound by the 1992 North Pacific Salmon Treaty, they are bound by customary international law. Under customary international law, embodied in UNCLOS, states-of-origin of anadromous fish have control of those fish throughout their migratory range, including the high seas, and catches of salmon are prohibited without the approval of the state-of-origin. Therefore, nonsignatory catches of salmon on the high seas are as illegal as catches by signatory countries.

Sometimes nonsignatory illegal catches are "laundered" so that the salmon can be sold in signatory countries. "The Taiwanese appear to be the worst offenders [of illegal salmon fishing], despite recent efforts by their government." The Taiwanese pirate fleet is estimated at fifty to ninety vessels. In 1991, U.S. government officials were "shocked" when one Taiwanese newspaper brashly reported that fifty Taiwanese boats had already illegally fished for salmon in the North Pacific that year.

B. Reflagging

Reflagging is a common method used by fishermen from countries bound by international agreements to allow them to fish without interference

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106. See supra notes 67-71 and accompanying text.
107. Id.

In a typical operation, authorities said, the salmon are collected by boats from Japan, Taiwan or South Korea, transferred to larger mother ships and then "laundered" back to the fish markets of America and Europe. For example, since 1985, France has bought an increasing amount of salmon through Singapore, which has no high-seas fishing fleet.

Id.

A 1990 report from the National Oceanic and Atmospheric Administration, which administers fisheries, revealed that during the previous three-and-one-half years, agents seized 1,296,709 pounds of salmon which had been imported to the United States illegally from Singapore, Hong Kong, and other Asian ports. The fish would have been exported again, this time to Japan, to be sold as an American product as part of a "laundering" operation. Nelson Bryant, Net Out for Outlaw Salmon Fishers, N.Y. TIMES, May 27, 1990, at F10.

In 1991, U.S. federal agents exposed a salmon "laundering" scheme in which it was alleged that 1.2 million pounds of salmon illegally caught by Taiwanese fishermen were stored in China and were scheduled to be shipped to Chile, where they would be repackaged and relabeled before being shipped to the United States as a product of Chile. Dee Norton, Three Charged in International Illegal-Salmon Deal, SEATTLE TIMES, May 13, 1991, at A1.

The Fisheries Council of British Columbia found that illegally taken salmon canned in Thailand and marked "product of Canada" was being sold in Australia. Gordon Hamilton, Salmon Pirates Scourge of B.C.: Bogus: Special Tins Considered, VANCOUVER SUN, Mar. 4, 1993, at D1.

109. Roberts, supra note 108. The Taiwanese tradition of unrestricted fishing on the open sea is part of the issue. Id. "[O]ver the last ten years, the Taiwanese have been the biggest problem in terms of renegade, pirate vessels fishing blatantly and directly for salmon with drift nets." Bryant, supra note 108.


111. Dee Norton, Bold Report of Illegal Taiwanese Catches, SEATTLE TIMES, July 13, 1991, at A10. The report also stated that each vessel was expected to earn $740,000 (U.S.). Id.
from domestic laws.\textsuperscript{112} States that are signatories to international agreements that are not self-executing, such as the 1992 North Pacific Salmon Treaty, pass internal legislation outlawing their nationals from undertaking actions prohibited by the agreement.\textsuperscript{113} To circumvent domestic laws implementing the treaty, fishermen from a signatory country register their vessels in a country that is not party to the treaty and has no legislation prohibiting the desired type of fishing. This practice is called reflagging, and it is outlawed by the four signatories to the 1992 North Pacific Salmon Treaty.\textsuperscript{114}

C. Driftnets

A related problem is the use of driftnets. Driftnets are large panels of net webbing suspended from the top of the water by floats and weighted at the bottom so that they hang vertically in the water.\textsuperscript{115} The nets may stretch

\begin{footnotesize}
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Therefore, if the U.S. Coast Guard wishes to board a foreign flag vessel on the high seas but is denied permission to board from the vessel itself, it will request permission to board from the flag state. The State Department will pursue the request through the U.S. embassy in the flag state. The flag state will often grant permission promptly by telephone or cable. This permission constitutes an “arrangement” with the flag state so that the vessel is now constructively in U.S. customs waters, and the Coast Guard may board it. See Innis, supra.


114. 1992 North Pacific Salmon Treaty, supra note 1, art. IV(3). In 1990, The Soviet Union seized a fleet of at least 10 fishing boats flying North Korean flags with a total of more than 200 crew members, 140 to 170 of which were actually Japanese. It was revealed that several Japanese fishing companies constrained by Japanese government-imposed quotas had struck a deal with a North Korean fishing enterprise. In a ruse to avoid Japanese quotas, the Japanese fishermen gave the North Koreans “technical assistance.” In return, the Japanese fishing boats were painted with North Korean flags. The fleet fished for salmon of Soviet origin in the North Pacific. Japanese officials hypothesized that the fishermen felt that the Soviets would not enforce their poaching laws against North Korean boats because of the two countries’ political alliance. They were wrong.

The catch was sold at Tokyo’s fish markets for a profit of tens of millions of dollars which was split with the North Koreans. The Soviet government considered the fishermen guilty of “malicious poaching.” Japanese officials promised to punish the fishermen if it were determined that they had violated Japanese law. David E. Sanger, North Pacific Poaching Arrests Have Tokyo Squirming, N.Y. Times, May 30, 1990, at A3.

The boats were held for 10 weeks by the Soviet navy, and the incident caused considerable embarrassment to the Japanese government. Campbell, supra note 15.

115. Hayashi, supra note 56, at 357.\end{footnotes}{112. Under UNCLOS, ships on the high seas are under the exclusive jurisdiction of the state whose flag they fly. UNCLOS, supra note 50, art. 92(1). Law enforcement officials therefore lack jurisdiction over and may not board a vessel of a foreign flag state on the high seas. This situation often arises in drug enforcement. David R. Innis, The U.N. Convention Against Illicit Traffic in Narcotic Substances and Psychotropic Substances, 37 Fed. B. News & J. 118 (1990).\protect

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115. Hayashi, supra note 56, at 357.
up to thirty-five miles in length. They drift free in the water and entangle fish so effectively that they have earned the nickname "walls of death." 

In the late 1970s, driftnet use grew quickly after the discovery of large stocks of squid in the North Pacific. It was primarily Japanese, Taiwanese, and South Korean vessels that fished for North Pacific squid with driftnets. Because driftnets are nonselective, they may trap other fish besides squid. This can significantly impact salmon stocks. Above forty degrees north latitude, salmon are the most numerous fish in the upper waters of the ocean and therefore are likely to be ensnared in driftnets. To prevent the incidental taking of salmon by squid driftnets, Japan, Taiwan, and South Korea all enacted domestic legislation limiting driftnetting. However, the migratory range of salmon made it impossible to prevent all accidental catches of salmon by driftnets. Also, some fleets used squid driftnetting as a cover for driftnet fishing directed at salmon.

In 1989, the U.N. General Assembly adopted a resolution to prohibit driftnet fishing by the end of 1992. Unfortunately, General Assembly resolutions such as this are not binding; they serve only as recommendations. Relatively more significant progress was made the same year after Canadian and American pressure and a threat of an American trade embargo persuaded Japan, Taiwan, and South Korea to enter into agreements with the United States that authorize the use of observers and other methods to enforce a ban on driftnet fishing. Notwithstanding these successes, the problem persists. Some driftnet fishermen from these states have reflagged, registering their vessels under Chinese and Honduran jurisdiction to avoid their own governments' regulations outlawing

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117. Id.
118. Id.
120. Id.
121. Id. at 109.
122. Id. at 109.
123. Id. at 109.
126. Id. at 371-72.
IV. Enforcement Issues

The 1992 North Pacific Salmon Treaty expands signatory policing powers, but can the four countries really put a stop to the lucrative black market in North Pacific salmon? In the new treaty, techniques for enforcement at sea remain the same as in the 1952 North Pacific Convention, but the signatories have added new measures to enforce the treaty on land through the market.

A. Enforcement at Sea

The 1992 North Pacific Salmon Treaty allows signatories to board the ships of other signatories "which can be reasonably believed to be engaged in directed fishing for . . . anadromous fish . . ."128 If there is a violation, the enforcing party may "arrest or seize" the crew or vessel and deliver the offender to the government of his home state.129 The home state (but not the arresting state, if they are different)130 must then prosecute the offender.131 These provisions are substantially the same as those in the 1952 North Pacific Convention and those in the old agreement concerning salmon between the former Soviet Union and Japan—the two North Pacific regimes that existed before the 1992 North Pacific Salmon Treaty.132

The treaty covers a vast area of the Pacific Ocean.133 The biggest problem facing enforcers is the lack of an adequate number of patrol vessels. For example, the United States deploys no more than two to three

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129. Id. art. V(2)(b).

130. Senate Hearing, supra note 30, at 11.


132. Burke, supra note 2, at 117; see 1952 North Pacific Convention, supra note 19; supra part I.B.

133. "We're talking about millions of square miles of ocean [that] we have one or two aircraft to patrol with and . . . one or two vessels." All Things Considered: Salmon Fishing Pirates To Be Pursued (National Public Radio broadcast, Apr. 14, 1992), available in LEXIS, News Library, Arcnews File [hereinafter Pirates To Be Pursued].

A reporter who accompanied a Canadian Armed Forces flight crew on a five day intelligence mission covering approximately 300,000 square miles in a box 3000 nautical miles west of Victoria to 1500 nautical miles east of the Japanese island of Hokkaido described the incredible size of the North Pacific. "[Y]ou're up against a piracy that happens so far from the nearest port that this CP-140 has to burn two tonnes of fuel per hour at $1000 per hour for 12 hours just to get here to watch it happen." Terry Olavin Vansun, Pirates of the Pacific: Every Year, They Kill More Than a Million Birds and Sea Mammals and Steal Almost a Million Kilograms of Salmon, VANCOUVER SUN, July 13, 1991, at A12.
Coast Guard vessels in the North Pacific.\textsuperscript{134} An apprehension under the treaty requires an actual boarding of the offending fishing boat,\textsuperscript{135} which must be done from a surface vessel. It is not sufficient for a Coast Guard aircraft to fly overhead, record the identification numbers of an offending boat, and later report the violation to the boat's home state. There must be an actual boarding.\textsuperscript{136} Given the vast size of the area to be patrolled, cooperative enforcement techniques and expanded patrol efforts seem to be necessary for more effective enforcement.

In April of 1992, the four signatories to the treaty met in Seattle, Washington, to discuss a joint "anti-piracy plan."\textsuperscript{137} They decided that each country would "monitor" a section of the North Pacific Ocean and that they would share information among themselves.\textsuperscript{138} "The enforcement officials will use radios and fax machines to stay in contact so that if a pirate ship is spotted, the closest enforcement boat, no matter which of the four nations it's from, can be dispatched to the scene."\textsuperscript{139}

The signatories also promised individually to increase policing efforts. The Russian Federation announced plans to nearly triple its enforcement vessels.\textsuperscript{140} It now deploys four patrol boats, each with its own helicopter, and "two or three armed cutters."\textsuperscript{141} However, the Russian Federation fleet recently experienced shortages of fuel that disabled some of the patrol boats and hampered enforcement.\textsuperscript{142} The U.S. Coast Guard increased its flight observation time to 800 hours per month, a forty-five percent increase, and the Canadians promised to increase their patrol flight time from 160 to 270 hours per month.\textsuperscript{143} Japanese domestic law prevents Japanese officials from boarding foreign vessels, but they agreed to police Japanese boats and report pirate boats to the proper countries.\textsuperscript{144}

The signatories employ impressive technology in their enforcement efforts. Russian planes have aerial photo capability, while American planes are equipped with $1 million "surface-searching radar" systems,

\textsuperscript{134} Senate Hearing, supra note 30, at 12. "The Coast Guard usually maintains just two, sometimes three, cutters on station for the entire region, which Alaskans note, has more coastline than all the other states combined. This would be something like California trying to enforce the highway speed limit with just two or three police cruisers." John Balzar, Industry's Feeding Frenzy Perils Richest U.S. Fishery; Resources: A Showdown Looms over Practices Some Fear Could Turn North Pacific into a Barren Region, L.A. TIMES, June 29, 1992, at A1.
\textsuperscript{135} Senate Hearing, supra note 30, at 11.
\textsuperscript{136} Id.
\textsuperscript{137} Pirates To Be Pursued, supra note 133.
\textsuperscript{138} Id.
\textsuperscript{139} Id.
\textsuperscript{140} Norton, supra note 110, at B1.
\textsuperscript{141} Id.
\textsuperscript{143} Norton, supra note 110, at B1.
\textsuperscript{144} Id.
allowing them to search from a high altitude and thereby cover a greater area.\textsuperscript{145} U.S. Navy satellites have previously assisted the Coast Guard's drug enforcement operations by tracking boats carrying marijuana.\textsuperscript{146} Because the satellites cannot spot drugs on ocean-going vessels, they can only be used to track boats already identified by undercover agents as carrying drugs.\textsuperscript{147} The same problem exists in the salmon piracy context—the satellites can track salmon pirates but cannot be used to spot them.

Officials of the U.S. National Marine Fisheries Service and the U.S. Navy's Space and Naval Warfare Systems Command have had "exploratory" discussions regarding use of the Sound Surveillance System (SOSUS) to track pirate fishing boats.\textsuperscript{148} The United States developed SOSUS in the 1950s as a listening device to track Soviet submarines in the Pacific Ocean.\textsuperscript{149} Although it is possible to track fishing boats with the system, financial barriers may make it an impractical enforcement option.\textsuperscript{150}

In October of 1993, the National Maritime Intelligence Center opened in Washington, D.C.\textsuperscript{151} The Center, comprised of a large bank of computers, is a revolutionary attempt to consolidate maritime intelligence from the U.S. Navy, Marine Corps, and Coast Guard in order to enforce embargoes and sanctions more effectively and to track smugglers and terrorists.\textsuperscript{152} The Center is expanding into nonmilitary areas and will be cooperating with the Departments of State and Commerce and agencies such as Customs, Immigration and Naturalization, and Drug Enforcement.\textsuperscript{153} An information network of this magnitude could be an invaluable tool for identifying and tracking illegal fishing boats in the North Pacific.

Although there have been advances in technology and cooperation for ocean patrols, the size of the North Pacific makes enforcement at sea difficult. Coordination of air patrols with surface vessels and the addition

\textsuperscript{145} Id. In July of 1991, a Coast Guard C-130 patrol flight located 26 pirate vessels on radar. A surface vessel was notified, but by the time it arrived, all but three boats had fled. U.S. officials boarded a Japanese boat, the Dain Maru, and searched it, finding 12 tons of frozen salmon. The boat was taken back to Japan. Campbell, supra note 15.


\textsuperscript{147} O'Toole, supra note 146.


\textsuperscript{149} Id. The SOSUS system works off of underwater listening devices called "hydrophones." In the 1950s, hundreds of hydrophones were placed in the North Pacific at 5- to 15-mile intervals along cables on the seafloor. Land-based computers recorded and analyzed underwater noise to track Soviet submarines. Id.

\textsuperscript{150} Id. Testing the SOSUS system would probably take three months and $500,000, and additional research and equipment could bring the cost of implementing the system to track pirate fishing boats to $2 million, a figure outside the budget of the National Marine Fisheries Service. Id.


\textsuperscript{152} Id.

\textsuperscript{153} Id.
of the Russian Federation to the treaty will ease the enforcement burden of the other three countries, and technology such as SOSUS and the National Maritime Intelligence Center may assist in the battle against pirate fishing.

The vastness of the North Pacific Ocean, however, seems to be an insurmountable barrier. Enforcement measures at sea are not enough. Furthermore, there is still the problem of nonsignatory fishing in the North Pacific. If a nonsignatory boat is discovered fishing for salmon on the North Pacific, signatories can stop it, because customary international law recognizes the state-of-origin's control over anadromous fish throughout their migratory range. The signatory can probably escort the nonsignatory vessel out of the treaty area and notify its home state, but there is no guarantee that the home state will take action against the offending vessel.

The 1992 North Pacific Salmon Treaty's method of enforcement at sea is substantially the same as that of the pre-1992 anadromous fish agreements. The failure of those treaties to protect and conserve salmon stocks adequately prompted the negotiation of the 1992 Treaty. The drafters of the treaty recognized the need for additional enforcement measures to compensate for the impossibility of adequate enforcement by ocean patrols. It was hoped that regulations regarding reflagging and the development of a certificate-of-origin program would fill the gaps left by at-sea enforcement.

B. Enforcement on Land

The 1992 North Pacific Salmon Treaty requires all signatories to enact domestic legislation to prevent their fishermen from "reflagging," or registering their boats in another country to avoid the prohibitions of the treaty. Nonsignatories, however, are under no obligation to comply with the 1992 North Pacific Salmon Treaty's prohibitions against reflagging. Some international conventions already attempt to limit reflagging, but they have met with little success.

One of these international conventions is UNCLOS, which requires a "genuine link" between a ship and the state whose flag it flies. A similar requirement is imposed by the 1986 United Nations Convention on Conditions for Registration of Ships, which is not yet in force, but which serves as evidence of some states' policies regarding flags of convenience. State practice, however, does not comport with this policy. A 1986 study estimated that forty percent of seagoing vessels were registered under flags

154. Burke, supra note 2, at 118.
155. See, e.g., supra notes 109-11 and accompanying text.
156. See 1952 North Pacific Convention, supra note 19, art. X.
157. 1992 North Pacific Salmon Treaty, supra note 1, art. IV(3).
158. UNCLOS, supra note 50, art. 91(1).
of convenience.\textsuperscript{160}

It is unlikely that the signatories will be able to catch all of their vessels that attempt to reflag as nonsignatories. State practice shows that the signatories cannot expect help in preventing nonsignatories from issuing flags of convenience.\textsuperscript{161} Also, as the signatories enter specific agreements with other states prohibiting salmon fishing in the North Pacific, nothing in those agreements requires those states to prevent their vessels from reflagging under the jurisdiction of other nonsignatories.\textsuperscript{162} Anti-reflagging provisions should be an express part of future treaties banning salmon fishing on the high seas.

Another on-land enforcement measure of the 1992 North Pacific Salmon Treaty is a certificate-of-origin program directed at salmon markets. The executive director of the Canadian Salmon Marketing Council once commented that the way to combat pirate fleets is through the external affairs department (i.e., trade administration), rather than through ocean patrols.\textsuperscript{163} The certificate-of-origin program attempts to implement this strategy.

States commonly use certificates-of-origin to establish the source of products on the market.\textsuperscript{164} They can be used either to give preference to or to restrict trade with certain countries.\textsuperscript{165} Depending on the origin of a product, countries impose different tariffs or other trade barriers to either encourage or discourage trade with that particular country of origin. In the context of trade in anadromous fish, for certificate-of-origin purposes, the origin of the fish is determined by the registration of the vessel catching the fish. The origin determines not just the tariff an importing country would impose, but also whether that fish product could be legally imported at all.

Article III of the 1992 North Pacific Salmon Treaty mandates parties to "take appropriate measures . . . to prevent trafficking in anadromous fish taken in violation of the prohibitions provided for in this Convention . . . ."\textsuperscript{166} One of the charges to the NPAFC, the international commission created by the treaty, is to assist the signatories in implementing a certificate-of-origin program which would prove that anadromous fish bought on the market were caught legally.\textsuperscript{167} Modern technology, in the form of a computer that analyzes fish scales, can identify where a salmon fish was hatched, thereby legitimizing determinations of origin.\textsuperscript{168}

\textsuperscript{160} Tetley, \textit{supra} note 159, at 173-74.
\textsuperscript{161} \textit{See id.}
\textsuperscript{162} \textit{See supra} part III.B.
\textsuperscript{163} Hamilton, \textit{supra} note 108.
\textsuperscript{165} \textit{Id.}
\textsuperscript{166} 1992 North Pacific Salmon Treaty, \textit{supra} note 1, art. III(3).
\textsuperscript{167} \textit{Id.} art. IX(7).

The machine takes a picture of the scale, and a frame grabber in the computer digitizes the image, rather like computerized fingerprint analysis.
The United States already has certificate-of-origin programs for tuna, plants and animals listed as endangered species, and textiles. A salmon program would be different because it would certify the legality of U.S. exports. The U.S. government would have to work with states that import salmon from the United States or other countries with legal salmon fisheries to ensure they have adequate rules to certify that the imported salmon is a legal export.

The problem with this approach is the time and expense required to negotiate individual agreements with importing countries. Not only must the United States form these agreements, but so must Japan, Canada, and the Russian Federation. The difficulty of this approach is illustrated by the experience of the United States. In 1990, even before the creation of the 1992 North Pacific Salmon Treaty, Congress authorized the Department of State to negotiate and the Department of Commerce to implement a certificate-of-origin program for anadromous fish products. The Department of Commerce has not yet established such regulations because Congress required the Department of State first to negotiate the needed agreements with foreign governments, and it has not yet done so. Therefore, five years after congressional authorization, there are no certificate-of-origin programs for anadromous fish products.

An alternative to individual negotiations is to use the NPAFC, the international body created by the 1992 North Pacific Salmon Treaty, as a regional organization with the power to negotiate for all the signatories. This unified approach would save time and expense, and it would also avoid the fragmentation and disorganization that would otherwise maintain opportunities for fish laundering through states who have not yet negotiated certificate-of-origin programs.

Another potential problem with a certificate-of-origin program is that disputes as to the actual origin of the product may arise. For example, if salmon are caught by a nonsignatory nation but are brought into a signa-

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Fish scales have treelike "growth-rings," and the pattern varies according to environment and heredity. This information is stored in the computer so scientists can make comparisons to ascertain which river or hatchery district a fish came from.

Senator Murkowski commented on this technology during the hearing before the Senate Committee on Foreign Relations: "Unfortunately, that salmon I bought [in Singapore] did not turn out to be an Alaskan salmon. The National Marine Fisheries did an identification. But it was a Washington State salmon, bred in one of the Washington rivers. It's amazing what they can do with those scales in their studies." *Senate Hearing, supra* note 30, at 14.

169. *Senate Hearing, supra* note 30, at 27.
170. *Id.*
171. *Id.*
172. *Id.*
tory nation for processing and export, there is a dilemma as to which state is the country of origin. The prevailing international standard for determining origin focuses on the place of the last substantial transformation, "i.e. the country in which the last substantial manufacturing or processing occurred, deemed sufficient to give the product its essential character."\(^{175}\)

States can set specific rules as to how much production must be conferred on a product in a state in order for that state to qualify as the country of origin.\(^ {176}\) The goal is to prevent simple packaging or other superficial processes from determining origin.\(^ {177}\) For certificate-of-origin programs to be successful for anadromous fish products, signatories will have to establish unambiguous rules as to whether processing of fish within a signatory country can grant country of origin status. If so, then these rules must also address what minimum amount of processing must be completed. Having a signatory as the country of origin would allow the fish to be imported into other countries in compliance with negotiated certificate-of-origin programs under the 1992 Treaty.

If salmon can only be imported into foreign countries if it has a certificate-of-origin from a signatory country, then it is possible that salmon laundering schemes will continue, but with a twist. Salmon will probably be caught by fishermen from nonsignatory countries and illegally sold to dealers within signatory countries. Those dealers, claiming that they originally caught the fish, will then obtain a certificate-of-origin, allowing them to export the fish to foreign countries that refuse to import salmon without such certificates.

Without constant vigilance, market programs such as the certificate-of-origin program will be circumvented by imaginative criminals. In the meantime, consumers will bear the costs of instituting these restrictions on trade. Of course, this depends on whether the signatories to the 1992 North Pacific Salmon Treaty can negotiate these agreements at all. Unless the signatories adopt an organized approach to negotiating certificate-of-origin programs, perhaps through the NPAFC, it is doubtful that such programs could reduce trafficking in illegally caught salmon. Furthermore, if the signatories adopt different rules or standards for such programs, there will be an incentive to launder illegal catches in the country with the most relaxed standards at the expense of the true country of origin. Consequently, it is important that the signatory countries coordinate the implementation of certificate-of-origin programs.

Conclusion

The addition of on-land enforcement provisions to the 1992 North Pacific Salmon Treaty is an improvement over the old 1952 North Pacific Convention. Although provisions regarding enforcement at sea have remained essentially unchanged, actual enforcement stands to be improved because

\(^{175}\) Hoekman, supra note 164, at 84.
\(^{176}\) Id.
\(^{177}\) Id. at 85.
the addition of the Russian Federation has widened the territorial reach of enforcement vessels, even with its fuel shortages and accompanying problems. Additionally, technology such as aerial photography, radar, satellite capability, SOSUS, and the National Maritime Intelligence Center will all aid the fight against illegal salmon fishermen.

However, even with added ocean patrols, the immense size of the North Pacific Ocean favors pirate fleets. The addition of on-land enforcement measures has improved signatories' capabilities to combat trafficking in illegally caught salmon, but without a strong commitment to implement and enforce these measures, they will be ineffective.

The 1992 North Pacific Salmon Treaty elicited the signatories' commitment to enact domestic legislation to prevent reflagging of fishing vessels, but issuing flags of convenience is such a widespread practice that the effectiveness of this legislation is doubtful.

The major improvement in the new treaty is the addition of market enforcement provisions. These empower the signatories on a second front, beyond the ocean. A certificate-of-origin program would be a great aid to the prevention of trafficking in illegal salmon. However, such a program is unlikely to be effectively implemented without coordination through the NPAFC. With NPAFC coordination, the certificate-of-origin program will be a great aid in the prevention of trafficking in illegally caught salmon by using the market to fill the gaps left by ocean patrol enforcement. However, there will still be many opportunities for traffickers to circumvent the program and to continue laundering salmon. Without coordination and vigilance, the program will be ineffective. Only through commitment and concerted effort can the North Pacific countries reserve for themselves the benefits of their salmon—their natural resource.