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The Soviet Pacific Fishing Fleet: After More Than Fish

An Intelligence Assessment

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The Soviet Pacific Fishing Fleet: After More Than Fish

Key Judgments

The Pacific Ocean is now the USSR's premier fishing ground. Soviet fishing vessels regularly operate around its rim, off the coasts of New Zealand, Peru, and Chile, over scattered points in midocean, and just outside foreign coastal zones. With coastal fisheries increasingly denied, Moscow will probably next expand fleet operations to the Pacific regions of the Antarctic. Such operations—including transit to and from the fishing grounds—would extend the Soviet presence over a still broader area of the Pacific

The Pacific now provides one-half of the USSR's total annual ocean catch. During the 1970s fish provided about 15 percent of the animal protein in the Soviet diet. Of late this food source has assumed increasing importance, since the catch is obtained without the massive hard currency expenditures associated with grain imports. The fishing grounds off the north Asian coast remain the most important for the Soviets, currently producing some four-fifths of the annual Pacific Ocean catch. Fishing grounds lying just outside the Chilean and Peruvian 200-mile coastal zones rank second, with those off North America and New Zealand ranking third and fourth, respectively. To facilitate its fishing operations, the USSR has concluded a number of bilateral agreements with Pacific countries. These include licensing arrangements that allow Soviet vessels to fish in foreign coastal zones, joint fishing ventures with local private companies, and port use agreements that provide repair, supply, and crew transfer facilities. Some countries suspended these agreements after the Soviet invasion of Afghanistan, but Moscow continues efforts to establish more, especially with the newly independent island countries in the tropical Pacific

Because of its size and equipment, the Soviet Pacific fishing fleet brings with it military and intelligence capabilities. The fleet's travels, for example, put it into position to implant navigation and surveillance devices, collect communications and radar signals, monitor foreign ships and aircraft, and reprovision naval vessels should the need arise. The repeated return of Soviet fishing and fisheries research vessels to isolated Pacific regions in the face of declining catches there suggests the possible use of the fishing fleets for scientific research, communications and navigation work, military support, or intelligence gathering

Whatever its secondary objectives, the extended activities of the Soviet fishing fleet increasingly impact on US interests. Soviet vessels will appear more frequently in shipping lanes vital to the United States and Japan and in areas of ANZUS naval maneuvers. ANZUS navies will therefore find it more difficult to operate unobserved in the Pacific. Moreover, they will have to increase their surveillance operations to keep track of the activities of the Soviet fishing fleet over a broader area. Moscow is also pushing to sign fishing agreements with as many South Pacific island nations as possible. Such agreements would institutionalize the Soviet presence and provide increased opportunity to influence the policies of the nations there.

The Soviet Pacific Fishing Fleet: After More Than Fish

The Soviet fishing fleet is the largest in the world. With some 4,500 vessels of 100 gross registered tons or more, it accounts for more than half of the world's fishing tonnage. The fleet consists of a variety of trawlers and seiners as well as factory ships that perform a full range of processing operations. Fishing fleet operations are routinely supported by tankers, supply ships, rescue tugs, and research ships. Fleet equipment is constantly updated, and Soviet fishing vessel technology is second to none in sophistication. Productivity is another matter. Japan, with a fleet two-thirds the size, consistently out produces the USSR, in large part through more efficient use of labor

The Soviet fishing fleet's paramount function is fishing. Nevertheless, although not normally under the control of the Soviet Navy, the fishing fleet enhances Soviet security capabilities in the areas in which it operates. Following are some of the intelligence gathering and military support missions that elements of the fishing fleet are known to conduct:

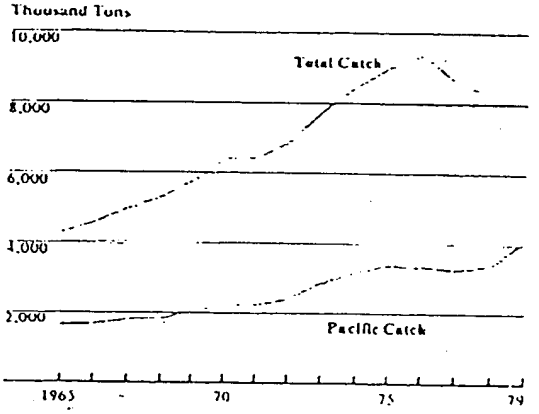
- Collection of communications and electronic intelligence.
- Visual monitoring of the activities of foreign ships and aircraft.
- Visual and electronic observation of Allied naval activities, particularly exercises.
- Reprovisioning of Soviet naval units.
- Collection of oceanographic and hydrographic data.

Focus on the Pacific

Soviet activity in the Pacific has increased markedly during the past decade. The Soviet Navy now operates throughout the Pacific, although the Far Eastern region remains the main area of activity. With the proliferation of 200-mile fishing and economic zones in the mid-1970s, the Soviet fishing fleet was forced from many time-proven coastal fishing grounds, especially in the Atlantic. With the resulting emphasis on open-seas operations, the Pacific fisheries have assumed greater importance to the Soviet Union. Consequently, Soviet fishing vessels can now be found in almost all parts of the Pacific. Nearly 1,700 Soviet ships operated in the Pacific area last year, making the Soviet fleet the largest in the region. Fishing and port-call agreements reached with a number of countries in the basin heightens the Soviet presence, as does the relatively large number of sophisticated research vessels that the Soviets operate in the Pacific

Figure 1

Soviet Ocean Catch



Fishing Activities

The Soviets now take about 4 million tons annually from the Pacific Ocean, half their global catch and double what was taken a decade ago. In all, some 12 percent of the total Pacific catch accrues to the USSR, compared with the US share of less than 3 percent. Almost 8 percent of the total animal protein

supplies available to Soviet consumers in recent years has come from the Pacific. Of late this source has assumed increasing importance, since the catch is obtained without the massive hard currency expenditures associated with grain imports.

Although the Pacific accounts for a growing share of the Soviet fish catch, the number of fishing ships used in the Pacific has remained steady. The largest ship concentration is in the northern Pacific along the Asian coast, where for some time the Soviets have operated about 1,200 fishing vessels. This is the single most important fishing ground for the Soviets, and the size of the catch there has increased yearly. Nevertheless, because of gains elsewhere, the Asian waters have yielded a smaller share of the total Pacific catch in recent years—declining from a high of 90 percent in 1977 to 79 percent in 1979.

Soviet fishing vessels have worked the North American grounds—which extend from the Bering Sea to California—since the mid-1950s. By the early 1970s as many as 900 ships produced one-third of the USSR's Pacific catch from these fisheries. Establishment of the Canadian and US 200-mile coastal zones reduced the Soviet catch in the region to only 5 percent of the Pacific total in 1979; the number of vessels sighted dropped to about 700. Since then the Soviet catch has been further reduced, the result of denied access to the Canadian and US coastal zones in the aftermath of the Afghanistan invasion.

Accordingly, the Soviets have turned to the fishing areas off the South American coast, particularly those off Chile and Peru. In 1978 the Soviets operated less than 20 ships on the South American fishery, but last year they deployed at least 260 ships there. The South American coastal fishery is now the second most important Pacific fishing ground for the USSR, accounting for 13 percent of its Pacific catch in 1979.

The USSR has also greatly increased its presence in the fishery over New Zealand's vast continental shelf. Last year some 300 Soviet fishing vessels were sighted in the area, compared with about 200 in 1980 and an average of only 40 annually in 1975-78. Nevertheless, in recent years the Soviet catch there has averaged less than 60,000 tons annually—roughly 2 percent of the total Pacific catch. New Zealand fish stocks never proved as massive as the Soviets originally estimated. Additionally, Soviet vessels are restricted, by terms of the agreement with New Zealand, to deep water and less popular species. Although constrained by New Zealand's economic zone, the Soviets benefit from several joint ventures with New Zealand firms.

Pacific Fish Catch 1965-79

Thousands tons

	1965	1970	1975	1978	1979
USSR	1,591	2,216	3,368	3,381	4,106
Japan	6,361	8,303	9,384	9,709	9,488
United States	550	729	786	881	964
Other	15,301	23,432	17,014	20,031	20,698
Total	23,803	34,680	30,552	34,002	35,256
Total Soviet Ocean Catch	4,274	6,391	9,031	8,197	8,308

Pacific Basin Agreements

The USSR has negotiated maritime agreements with a number of Pacific Basin countries—and offered to negotiate with others. Such agreements may allow the Soviets access to coastal fishing grounds otherwise denied to them by the creation of 200-mile economic zones, grant Soviet ships the right to make calls in specific ports in order to service vessels, or establish joint maritime research projects. Although these agreements are in large part necessary to support Soviet fishing activities, they also serve to institutionalize the Soviet presence in the area.

Fishing Agreements. Moscow currently has access to 200-mile coastal fishing zones in the Pacific only off Japan, New Zealand, and Nicaragua:

- The agreement with Japan is reciprocal and allows Soviet fishermen to take 650,000 tons of fish in Japan's zone and Japanese fishermen to take 750,000 tons of fish in the USSR zone.

- The New Zealand arrangement allows Soviet vessels to fish New Zealand waters independently upon purchase of a license and payment of fees based on the size of the catch. There are also three joint ventures set up in part to train local fishermen who are to eventually take over the entire operation.

- In 1981 Nicaragua accepted a Soviet offer of fisheries aid, and Soviet ships are now surveying the resources in the Nicaraguan 200-mile zone. The agreement probably parallels those offered other countries, which provide for formation of a joint venture company (51-percent locally owned), building or upgrading of port and onshore processing facilities, training of local personnel, a division of the catch, and the contribution of Soviet equipment.

The Soviets enjoyed greater access to the coastal regions until their invasion of Afghanistan. At that time New Zealand halved the catch quota of independently licensed vessels and imposed port and personnel restrictions. Agreements negotiated with Australia, Canada, and the United States were suspended when those countries expelled Soviet trawlers, also to protest the invasion. Soviet factory ships may still enter the US zone, however, to take on fish caught by US fishermen under a joint venture agreement with a private company set up in 1978.

Port Privileges. Operating far from its home ports, the Soviet fishing fleet requires port facilities near its fishing grounds for vessel repair and maintenance, refueling and resupply, transshipment of catch, crew changes, and R&R. While Soviet ships would have access to any port in an emergency, Moscow has negotiated specific rights in certain Pacific ports. Singapore is the major such port in the western Pacific. Fuel, supplies, and complete port facilities are available there including drydocks for major repairs. Fresh crews are flown in from home and board ships in Singapore, enabling the fleet to remain on the fishing grounds almost indefinitely. A joint-venture company set up there in 1975 processes a portion of the Soviet catch

The Soviet fishing agreement with Wellington allows Soviet fishing vessels repair, fueling, and supply privileges in Auckland, Wellington, Dunedin, Lyttleton, and Nelson. Nevertheless, following the Afghanistan invasion, New Zealand withdrew certain services in Auckland and restricted the movement of Soviet fishermen while in port. Fishing vessels traveling between the Soviet Far East and the South Pacific also stop in Suva, Fiji, where Moscow has arranged for fueling and supply

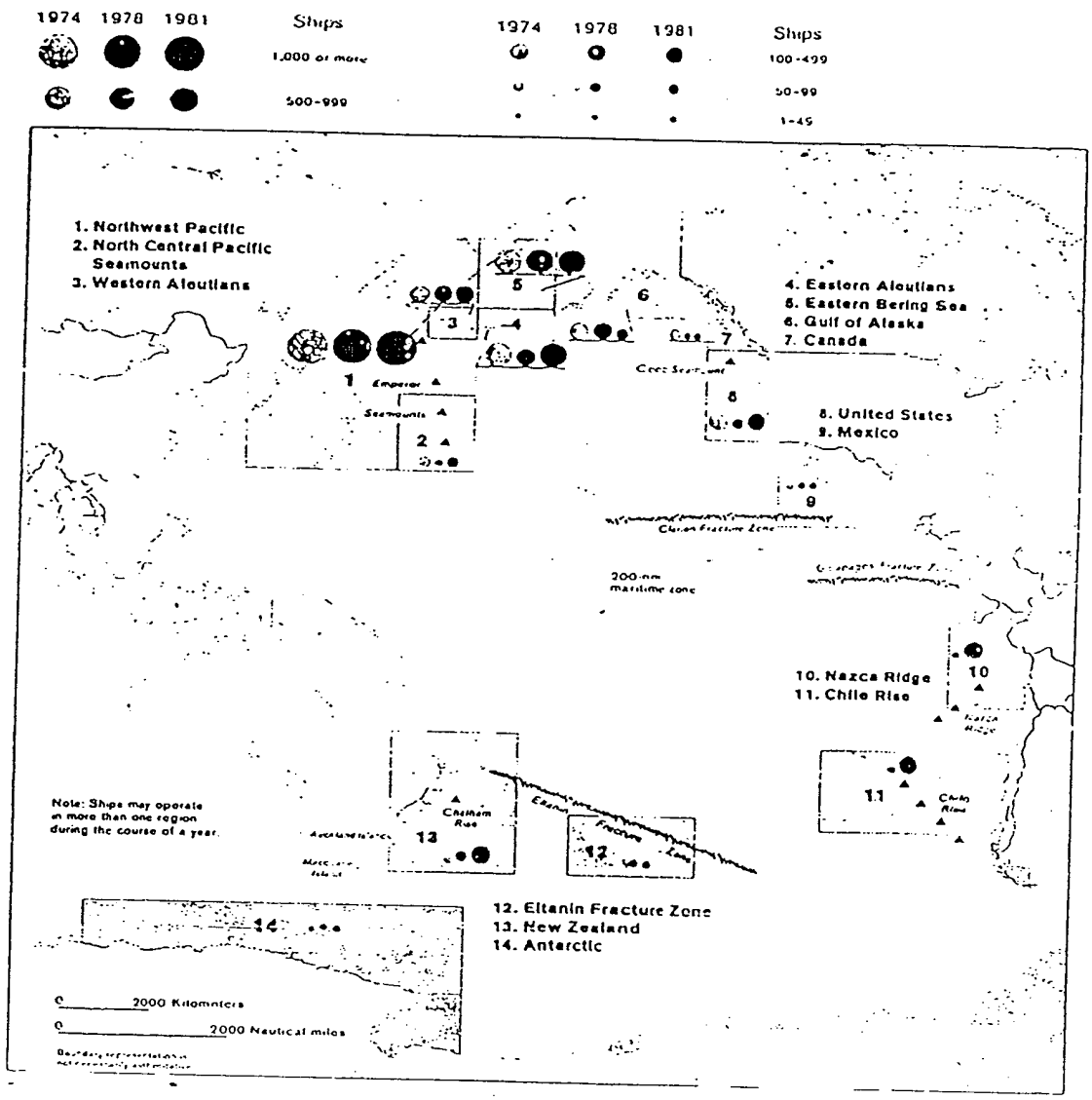
US-USSR Joint Venture

Although Soviet fishing vessels no longer operate in the US zone, Soviet factory ships and fishery research ships do. The factory ships operate in a joint venture with US companies; the research ships in a cooperative arrangement with the US National Marine Fisheries Service, the Department of Commerce agency that manages fishing in the US 200-mile zone. Under terms of the joint venture, established in 1978, US fishermen deliver fish caught under their own favorable quotas in the US zone to Soviet factory ships, making the transfer at sea. A varying number of US vessels and 30 to 40 factory ships are involved, processing pollack and some flounder in the Aleutians and hake off Washington, Oregon, and California. The joint venture production increased from 9,209 tons of fish worth $1.02 million in 1979 to 81,124 tons worth $10.9 million in 1981. The fishery research program began as part of the licensing agreement that permitted Soviet fishing in the US zone. It has been continued, despite the ban on Soviet fishing.

Portcalls by Soviet fishing vessels in South America occur mainly in Equador, Peru, and Chile. In Peru the Soviets regularly use Callao, where their fishing ships are serviced at the naval facility, and Paita, where they provided aid to construct port facilities; crew rotations in Peruvian ports alone involve 3,000 seamen annually. Soviet fishing vessels also call at Valpariso, Chile; Quayaquil, Equador; Vancouver, Canada; and at US ports including Portland, Seattle, and Honolulu. Although Soviet trawlers no longer operate in the US zone, Soviet factory ships do--some with nearly 300 crewmen. With four days' advance notice, they can enter US ports for supplies, mail, and R&R

Figure 2

Pacific Ocean: Sightings of Soviet Fishing Ships



Unaccepted Offers. Moscow has attempted to establish fishing, port-use, or marine resource survey agreements with Papua-New Guinea, Tonga, Western Samoa, and the Cook Islands in the South Pacific as well as with the Philippines and a host of Latin American countries. Many countries are reluctant to enter into joint ventures, although they would have a controlling interest, because of reports from other LDCs that training programs are ineffective and Soviet fishermen keep the best fish for shipment to the USSR while providing local processing facilities—often built by the Soviets—with inferior fish. They may also be influenced by reports of Soviet overfishing in poorly policed areas. Such overfishing occurred off the US and Canadian coasts where, before the 200-mile zones were in effect, fishing took place under unenforceable international regulations

Offers to Chile, Colombia, Indonesia, Malaysia, Fiji, Mexico, Panama, and the Philippines are still outstanding. Papua-New Guinea, the Cook Islands, Tonga, and Western Samoa, which delayed negotiations on resource survey ventures at the urging of Australia and New Zealand, suspended negotiations in the aftermath of the Afghanistan invasion. Late in 1981, Western Samoa broke ranks and agreed to allow the Soviet research vessel *Kallisto* to operate out of Apia. Soviet fishermen may make headway elsewhere as the memory of Afghanistan fades or as nations become confident that they can effectively patrol their zones. Experience in several fisheries has shown that the Soviets abide by the rules where coastal countries exercise their rights to board fishing boats and inspect their catches

Research Activities

The Soviets operate the largest fleet of research vessels in the Pacific, with about 50 fishing research vessels and at least as many oceanographic research ships. Equipped with sophisticated oceanographic instrumentation, nets, and occasionally with submersibles, the fishing research ships collect a variety of hydrographic, biologic, and meteorologic data that are useful in finding new fishing grounds and monitoring the status of existing fishing grounds. Historically, they have focused their attentions mainly on the North Asian continental shelf, the Bering Sea, the Aleutians, the US West coast, and the waters off New Zealand. Research ships operating in the US zone carry some instruments and nets provided by the United States under terms of the Fisheries Research Agreement

The Soviets may be using some of these vessels to study the geology of the Pacific seabed. They are believed to be interested in testing sound propagation through the rock as well as through the water and in evaluating the mineral resources there. Fishery research ships carrying submersibles have operated off the US coast and along the Chile Rise. Study of these regions, as well as other areas located in fracture zones associated with areas of seafloor spreading (tectonic plate movement), would be especially fruitful for both types of research. Large cross sections of subsurface geology are exposed on the walls of the fractures and can be studied with the use of submersibles

Military and Intelligence Activities

The fishing fleet engages in a number of military and intelligence activities as well. Subject to cooptation by the Soviet Navy, fishing vessels have been used to collect communications and radar signals and to observe foreign ships at sea and also while in foreign ports. The larger ships in the fleet—the factory ships and the tankers—can resupply naval ships if the need arises. The trawlers, with their stern ramps, could be modified for minelaying and towing arrays of sensors. A new class of fast superseiners on order from Polish shipyards for use in the Pacific will carry tuna-spotting helicopters, which could also be useful for surveillance activities.

Research vessels are used in the same manner. Fisheries research ships collect oceanographic information that is useful for military planning. The submersibles carried by some of these ships could be used to implant seabed surveillance and navigation devices and to tap communications cables—although there is no evidence that the Soviets have done this yet, nor that they even have the capability to tap underwater cables. The sophisticated instrumentation on Soviet oceanographic research vessels can provide information on ocean temperature differences for use by Soviet submarines

Soviet fishing and research ships have appeared in areas of ANZUS naval maneuvers and in Western shipping lanes. While oceanographic and naval research ships are undoubtedly better equipped to carry out surveillance and monitoring operations, fisheries research ships offer good cover. They have an ostensibly innocent mission and could participate in joint research surveys in coastal fishing zones without provoking an ANZUS naval response

The Seamounts Issue. The activities of Soviet fishing fleets above underwater seamounts in the Pacific are especially questionable.[1] Except for two seamount areas lying off South America, seamount fisheries add little to the Soviet Pacific catch. Because of their restricted surface area, the nutritive base of seamounts is limited and their fish stocks are easily depleted. Indeed, Soviet fishermen have already overfished the Emperor seamounts that lie northwest of Midway Island, the chain of seamounts that lie just outside the US 200-mile fishing zone off Washington, Oregon, and California, and the seamounts that lie along the Eltanin Fracture Zone east of New Zealand. Totals from the Eltanin area fell from some 70 tons per day to less than half that in 1972, the first year of production, and by 1980 had fallen below 2 tons per day. In 1980 Soviet fishermen took just 1,200 tons from the Cobb Seamount, the northernmost of the seamounts off the US Pacific coast.

Despite the sharp decline in the catch, Soviet ships return to these depleted areas annually. Undoubtedly, the five seamount regions are attractive to the Soviets because they lie beyond national coastal zones and, consequently, are not subject to quota regulations. But the small catches from the Emperor, US, and Eltanin seamounts make them of questionable economic value to the Soviets. This continued activity may simply result from pressure on the Soviet fleet to maximize the catch regardless of costs. Their location, moreover, makes them useful to the Soviets for intelligence monitoring and data collection s

[1] Seamounts, submarine elevations that rise hundreds or thousands of meters above the abyssal seafloor, are broadly scattered over the Pacific seabed. They are the products of seafloor volcanism and fracturing. Some support exploitable quantities of fish, although such fisheries must be managed with extreme care. Seamount fish species are similar to continental shelf species and, therefore, are suited to capture by trawl net

[redacted]

Looking Ahead

The USSR will continue to expand its presence in the Pacific. Soviet fishing operations there will become more intense as the fleet attempts to maintain the size of its catch in the face of resource depletion and tightened control of the 200-mile zone by coastal nations. Most countries in the area are becoming more protective of coastal fish stocks and are especially wary of dealing with the Soviet fleet because of its reputation for overfishing in poorly policed regions. Consequently, the Soviet fleet will have to focus more on areas outside national coastal boundaries, particularly untapped seamount regions

Soviet fishermen probably will also increase exploratory operations in the Pacific sector of the Southern Ocean off Antarctica. We expect an all-out fishing effort there in the next few years as the Soviets attempt to establish as large a base-period catch as possible before ratification of the Antarctic Living Resources Treaty. The treaty would subject these resources to an international management plan. The Soviet harvest there in 1979 was only 800 tons, compared with 451,000 tons from the Atlantic sector. More than two-thirds of the Atlantic sector catch consisted of the small, shrimp-like krill, which many fishery experts consider the world's largest single source of animal protein

Such pursuits will heighten the visibility of the Soviet fishing fleet. While Soviet fishing beyond the North Asian continental shelf will take place largely outside national coastal zones, the number of vessels transiting these fishing grounds will almost certainly increase. (Generally, as long as they are not fishing,

[redacted]

such vessels are permitted free transit of foreign coastal fishing and economic zones.) The volume of oceanographic and fishing research activity is also expected to intensify, adding to Soviet regional access.

Impact on US Interests

Moscow's expanding Pacific operations will have some effect on ANZUS naval activities. With the likely increase in Soviet fishing intensity, increased surveillance operations will be necessary. Moreover, US and Allied vessels will find it more difficult to maneuver unobserved by Soviet vessels. Beyond this, the Soviet presence among the island nations of the central and western tropical Pacific will tend to spread along with the fishing fleet activity. These island nations bestride sea lines of communication between the United States, Australia, New Zealand, New Caledonia, and Papua-New Guinea. Moscow still wants to establish joint fishing or research arrangements in the area; at a minimum the number of routine port calls by Soviet fishing vessels will increase

Increased Soviet activity in the Pacific will not affect US fishing in the near term. In the Pacific waters beyond the US fishing zone, US fishermen concentrate on tuna, which the Soviets have not yet learned to catch and process effectively. US tuna fishing areas lie off Central and South America—largely within 200-mile coastal zones—and increasingly in Micronesian and New Zealand waters. Although Soviet fishermen will attempt to carve a niche for themselves in the tuna fishery, the more experienced US, Japanese, and Korean fishermen—backed by well-developed processing infrastructures—will have a strong competitive edge.

Soviet exploration for seabed minerals could eventually affect the timetable of US seabed mining programs. Until recently, the USSR showed little interest in mining the seabed, although Western firms have invested millions of dollars in research and development and the UN Law of the Sea Conference has spent nine years hotly debating how seabed mining should be carried out. This posture began to change in 1979 when Moscow proposed to several newly independent South Pacific countries a joint scientific research cruise that would include a survey of seabed mining resources. In December 1981 and January 1982 the Soviets tried to acquire certain items of Western seabed mining technology. How serious the Soviets are about seabed mining is not known. It would seem more appropriate for them to concentrate on developing their huge land-based mineral resources. Conceivably, however, by the time Western seabed mining consortiums begin their operations, they may find in the USSR a healthy and well-prepared competitor.

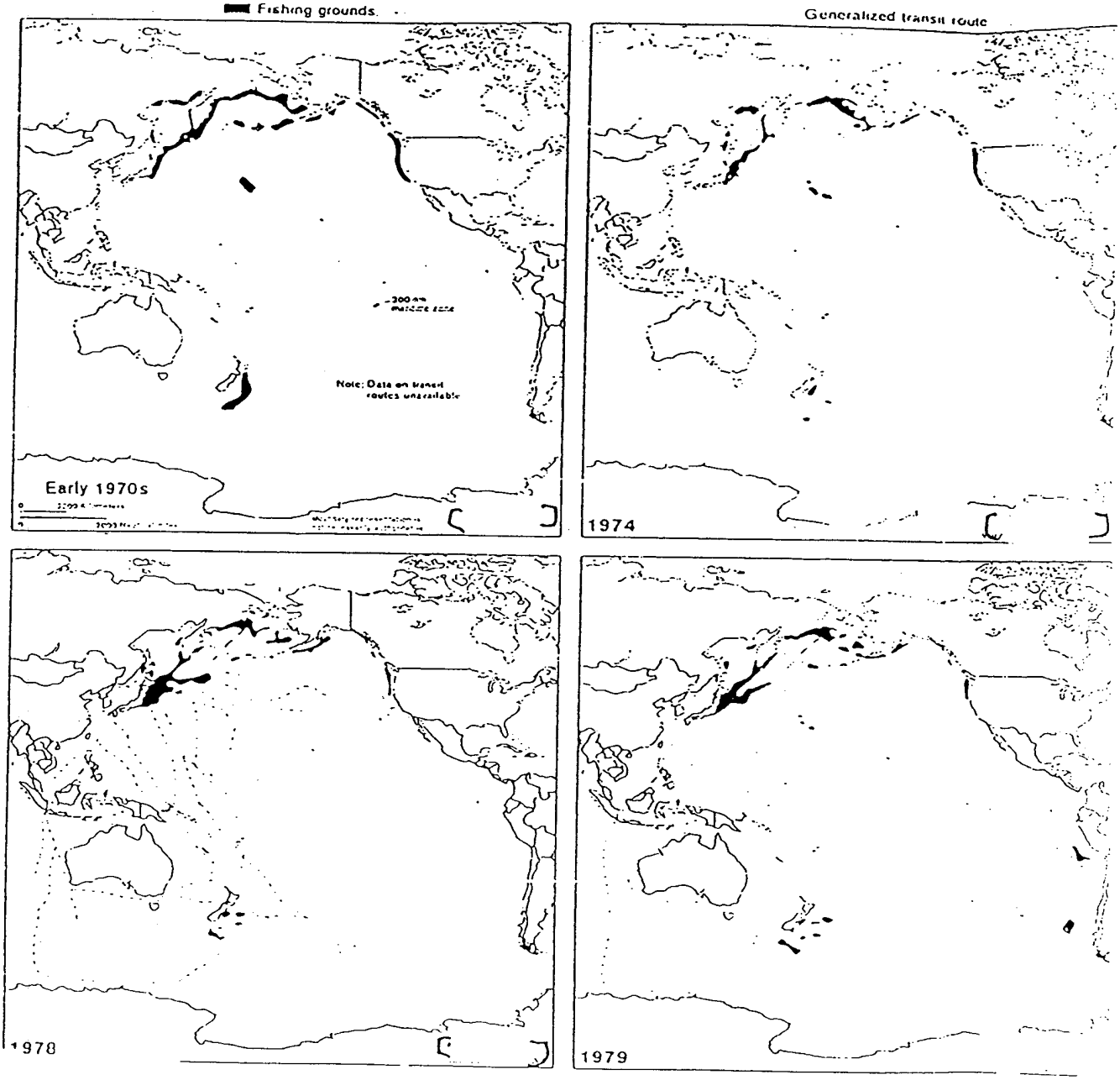

Fishing grounds
Generalized transit route
Note: Data on transit routes unavailable
Early 1970s
1974
1978
1979

Figure 3

Pacific Ocean: Soviet Fishing Grounds