

## 2. US PACIFIC ISLANDS

The US Pacific islands are politically and culturally diverse, comprising one state, two territories, a commonwealth and seven small islands and atolls of various jurisdictions. Fishing is of social and cultural significance to island communities. Pre-colonization Polynesian and Micronesian societies were heavily dependant on fish as a source of animal protein. Fish and fishing have unique socio-cultural significance for the indigenous peoples of the Western Pacific Region, and it was primarily with this in mind that the interests of island indigenous peoples were embodied in the Magnuson-Stevens Act during its 1996 reauthorization.

Today, US Pacific island populations include East and Southeast Asian immigrants, who share with the original Polynesian and Micronesian societies a strong fishing tradition and a strong dependence on fish for a large portion of the annual protein intake. Fish consumption in Micronesia and Polynesia typically averages about 130 lb/person/yr and even in more culturally diverse Hawaii, fish consumption is twice the US national average at about 90 lb/person/yr. Further, although most people do not need to fish to obtain food, recreational fishing is still an extremely popular pastime and is a cultural link with the activities of pre-contact societies. This also includes Hawaii, where at least one quarter of the population participates in some form of fishing activity at least once per year and the level of community involvement in fishing is higher than in many other US States. Recreational fishing in Hawaii involves not only residents but also a significant number of the annual 6.6 million tourists who want to experience game fishing in the tropical Pacific. This high level of recreational fishing

activity is economically important for the State and also of concern to the Council since much of it occurs in waters over which the Council has jurisdiction.

Unlike the other US Fishery Management Regions, the Western Pacific Region has little coastal shelf area and so the greatest volume of commercial fisheries production comes from highly migratory pelagic fishes, particularly tunas and swordfish. Demersal fisheries are of additional economic importance in Hawaii where there are limited fisheries for large snappers that live on the deep outer reef slopes, banks and seamounts. These species are also culturally important to elements of the Asian population in Hawaii, as large red fish are components of holiday feasts. An economically important trap fishery targeting lobsters on reefs and banks of the Northwestern Hawaiian Islands (NWHI) is now inactive pending research results. The balance of fishery production comes from fishing in the coastal zone, primarily from coral reefs and associated environments, and on small pelagic fish in the coastal zone.

These islands have unique political relationships with the United States. The State of Hawaii has four voting members of Congress and its citizens participate in the election of the President. The Territories of American Samoa and Guam and the Commonwealth of the Northern Mariana Islands have non-voting representatives in Congress. Nevertheless, the Council process affords these territories and commonwealth the ability to participate in the management of regional fishery resources.

## 3. FISHERIES OF THE US PACIFIC ISLANDS – HISTORICAL OVERVIEW

Fishing in the Pacific islands has traditionally focused on the coastal zone, but island fishermen were able to range beyond the lagoon to fish the outer reef slope for bottomfish and oilfish and the offshore waters for large pelagics such as tuna, rainbow runners and wahoo. Many different traditional fishing techniques have been documented from the various islands that now constitute the Western Pacific Region. These include traps, weirs, snares, hooks, gorges, nooses, nets and spears manufactured from locally available materials and developed through the accumulation of many centuries of experience. Along with the development of exceptional fishing skills, Pacific islanders were also highly skilled seamen navigating long distances over the open ocean, with systems based not on mathematical concepts, but an intuitive navigational system that integrated observations of the physical environment, behavior of marine fauna and astronomical observations.

The traditional paddle and sail powered canoes, typical of the region, have not entirely disappeared in the Pacific but have been largely replaced by fiberglass and aluminum skiffs powered by outboard motors. Similarly, urbanization and economic development have tended to focus fishing activity on variations of seine or gill netting, spearfishing (surface and diving) and

hook-and-line fishing (handlining and trolling). Although the range of fishing activities has narrowed, the relative fishing power of individual fishermen has increased with the introduction of monofilament nets and lines, metal hooks, diving gear such as fins and masks, and steel spears propelled by spear guns and surgical rubber bands. The acquisition of outboard motors and diesel engines has also meant that fishermen are able to reach coastal and offshore locations that in the past might have been inaccessible or visited only infrequently. In the last 20 years, the development of sonar and satellite technology has made fisheries more efficient and fishermen more effective at finding target fish.

The adoption of modern gears and vessels has often been accompanied by loss of the traditional body of knowledge concerning the natural history and life cycles of fish and other marine organisms. Pacific island fishermen also developed systems of tenure over reef and lagoon areas and systems to regulate these fishery resources based on natural cycles. Traditional ownership of nearshore reef and lagoon areas is still strongly maintained in parts of the region, but such systems break down with increasing urbanization and more contemporary management systems often fail to replace these older systems in their ability to regulate fishing.