## Appendix B: Glossary

- ABC See Acceptable Biological Catch.
- Abyss The deepest part of the ocean.
- Acceptable Biological Catch (ABC)- A term used by a management agency which refers to the range of allowable catch for a species or species group. It is set each year by a scientific group created by the management agency. The agency then takes the ABC estimate and sets the annual total allowable catch (TAC).
- Advection Horizontal or vertical movement of water.
- **Allele -** One of several variants of a gene that can occupy a locus on a chromosome.
- Allozyme A variant of an enzyme coded by a different allele.
- Amphipod Laterally compressed, planktonic or benthic crustaceans.
- **Anadromous -** Fish that migrate from saltwater to fresh water to spawn.
- Anaerobic Living in the absence of oxygen.
- **Angler -** A person catching fish or shellfish with no intent to sell. This includes people releasing the catch.
- **Annuli** Annual variations in the pattern of growth rings on fish scales.
- Aquaculture The raising of fish or shellfish under some controls. Feed and ponds, pens, tanks, or other containers may be used. A hatchery is also aquaculture, but the fish are released before harvest size is reached.
- **Artisanal fishery -** Commercial fishing using traditional or small scale manually-operated gear and boats.
- Ascidiacea See Tunicate.
- **Bag limit -** The number and/or size of a species that a person can legally take in a day or trip. This may or may not be the same as a possession limit.
- **Baitboat** Refers to a vessel that fishes with live bait. Examples of target catch for baitboats include albacore and other tunas.
- **Baleen -** A specialized plate of horny material used by some species of whales (Mysticetes) to filter-feed.
- **Barbel -** A slender flesh "chin whisker" found in many kinds of fishes. Barbels function primarily as sensory organs for locating food.
- **Bathymetry -** The science of measuring depths in the ocean.
- Batoid A skate or ray.

- **Beam trawl -** A conical-shaped net held open by an horizontal beam. At each end of the beam are iron frameworks that hold the net open in a vertical direction.
- **Benthic** Of, relating to, or occurring at the bottom of a body of water (including the ocean).
- Berried Bearing eggs.
- **Bight** A name for the water body found abutting a large indentation in the coast. A bight is less enclosed than a bay.
- **Billfishes -** The family of fish that includes marlins, sailfish and spearfish.
- **Bioaccumulation -** The build-up over time of substances (like metals) that cannot be excreted by an organism.
- **Biomass -** The total weight or volume of a species in a given area.
- **Biosystematics -** The study of relationships with reference to the laws of classification of organisms; taxonomy.
- **Biota** Refers to any and all living organisms and the ecosystems in which they exist.
- **Biotoxin -** Substances produced by organisms that can seriously impair living processes and in some cases cause death.
- **Bioturbation -** Disturbance of soft sediments by the movements and feeding activities of infauna (animals that live just beneath the surface of the sea bed).
- **Bivalve -** A mollusk with the shell divided into two halves; e.g. clams, mussels.
- **Brachiopod** A bivalve mollusk distinguished by having, on each side of the mouth, a long spiral arm, used to obtain food.
- **Brackish water -** Water of reduced salinity resulting from a mixture of freshwater and seawater.
- **Brail net -** A small dip net used to scoop out portions of the catch from the main net and haul these portions aboard. Brail nets are used to transfer tuna, salmon, and sometimes menhaden from the purse seine to the boat's hold.
- **Broken and burnt otolith method -** Otoliths are broken and burned, revealing more accurate information about the age of a fish.
- **Bryozoa** A group of sessile colonial animals that are colonial invertebrates and live on hard surfaces.
- **Bycatch** The harvest of fish or shellfish other than the species for which the fishing gear was set. Bycatch is also often called incidental catch. Some bycatch is kept for sale.
- CEQA California Environmental Quality Act.

- CPFV Commercial passenger fishing vessel.
- CPS Coastal pelagic species.
- CPUE See Catch Per Unit of Effort.
- **Calanoid copepod -** A crustacean zooplankton that has a barrel-shaped body, is found in all oceans of the world, and is an important food source for many fishes.
- Calcareous Made of calcium carbonate.
- **Capelin -** A small silvery fish, most common in the North Atlantic.
- **Caridean** An infraorder of the decapod crustaceans. Examples include many shrimps and prawns.
- **Catadromous** Refers to fish that migrate from fresh water to saltwater to spawn.
- **Catch -** The total number or poundage of fish captured from an area over some period of time. This includes fish that are caught but released or discarded instead of being landed. The catch may take place in an area different from where the fish are landed. Note that catch, harvest, and landings are different terms with different definitions.
- Catch Per Unit of Effort (CPUE) The number of fish caught by an amount of effort. Typically, effort is a combination of gear type, gear size, and the length of time gear is used. Catch per unit of effort is often used as a measurement of relative abundance for a particular fish.
- Caudal fin Tail fin.
- **Caudal peduncle -** The tapered, posterior fleshy part of a fish just in front of the tail fin.
- **Cephalopod -** Organisms belonging to the phylum Mollusca that are nearly always carnivorous and are characterized by complex behavior, a well-organized nervous system, a circle of grasping arms, and a powerful beak. Examples include squid and octopus.
- **Cetacean -** A member of the order of marine mammals that includes whales, porpoises, and dolphins.
- **Chimaera -** A member of a group of bottom-dwelling, invertebrate-feeding fishes. Distinctive characteristics include an operculum that covers four gill openings, an upper jaw fused to the skull, teeth consisting only of a few large, flat plates, and no scales.
- **Chitin -** A horny substance forming the hard part of the outer skeleton of crustacea.
- **Chiton -** Mollusks found commonly on hard substrates that are ovalshaped and flattened, have eight dorsal plates which cover the dorsal mantle, and are herbivores.
- **Chum -** To attract fish to a hook by throwing whole or chopped fish or shellfish into the water.

- **Cilia -** Hair-like structures used for locomotion, and in some species, for feeding.
- **Cladogenesis** The branching of an ancestral lineage to form equal sister taxa (species, genera, families, etc.).
- **Cladocera -** Planktonic crustacea with a bivalved outer skeleton.
- **Clupeid -** A member of the Clupeidae family of fishes. Clupeids include herrings, shads, sardines, and menhaden. They can be readily recognized by their keeled (sawtooth) bellies and silvery, deciduous scales.
- **Codend -** The end of a trawl net. Fish are eventually pushed into the codend as the net is dragged along.
- **Cohort -** A group of fish spawned during a given period, usually within a year.
- Coliform A bacteria commonly associated with food poisoning.
- **Community -** An ecological unit composed of the various populations of micro-organisms, plants, and animals that inhabit a particular area.
- Congener A member of the same genus.
- **Convergence -** The contact at the sea surface between two water masses converging, one plunging below the other.
- **Copepod -** A group of small planktonic, benthic or parasitic crustaceans. Copepods that spend their entire life in the water column are usually the numerically dominant group of zooplankton captured by nets in most marine
- **Coriolis effect -** The deflection of air or water bodies, relative to the solid earth beneath, as a result of the earth's eastward rotation.
- Creel A container used by anglers to hold fish.
- **Crustacean -** A group of freshwater and saltwater animals having no backbone, with jointed legs and a hard shell made of chitin. Includes shrimp, crabs, lobsters, and crayfish.
- **Ctenophore -** Gelatinous zooplankton having eight longitudinal rows of fused cilia ('ctenes') used in swimming.
- **Cultch -** Material (as oyster shells) laid down on oyster grounds that furnish points of attachment for the young oyster.
- **Cycloid -** A round, flat, and thin fish scale found on fish such as trout, minnow, and herring.
- **Davit -** A fixed or movable crane that projects over the side of a boat or over a hatchway. It is used for hauling nets, anchors, boats or cargo.
- **Demersal -** Describes fish and animals that live near water bottoms. Examples of demersal fish are flounder and croaker.

- **Density** dependent factors Factors, such as resource availablilty, that vary with population density.
- **Depuration -** Cleansing of bivalve shellfish by moving them from polluted waters to clean waters.
- Detritivore An organism that feeds on detritus.
- **Detritus -** Any loose material produced directly from rock disintegration.
- **Diatom -** One-celled phytoplankton with an external skeleton of silica.
- **Dinoflagellate -** Unicellular plankton having two flagella and, in some species, a cellulose test.
- **Doliolaria -** The second stage of the echinoderm (which include starfish and sea urchins) larvae.
- **Dorsal fin -** An unpaired fin on the dorsal or upper side of the body, between the head and the tail.
- **Dory -** A flat-bottomed boat with high flaring sides, a sharp bow, and a deep V-shaped transom.
- Downwelling The sinking of water.
- **Drum seine -** Similar to a purse seine but the seine is stored on a large drum mounted at the stern. The drum is particularly successful in handling shallow nets.
- EPA Environmental Protection Agency.
- ESA Endangered Species Act.
- **Ecosystem -** A group of organisms that interact among themselves and with their nonliving environment
- **Effort -** The amount of time and fishing power used to harvest fish. Fishing power includes gear size, boat size, and horsepower.
- **Ekman circulation -** Movement of surface water at an angle from the wind, as a result of the Coriolis effect.
- El Niño Condition in which warm surface water moves into the eastern Pacific, collapsing upwelling and increasing surface-water temperatures and precipitation along the west coast of North and South America.
- **Elasmobranch -** Describes a group of fish without a hard bony skeleton, including sharks, skates, and rays.
- **Electrophoresis -** A method of determining the genetic differences or similarities between individual fish or groups of fish by using tissue samples.
- **Embayment -** Formation of a bay. Also, the portion of water or coast that forms a bay.
- **Endangered species -** A classification under the Endangered Species Act. A species is considered endangered if it is in danger of extinction throughout a significant portion of its range.
- **Entrainment -** Mixing of salt water into fresh water, as in an estuary.

- **Epipelagic zone** The upper region of the sea from the surface to about 200-300 meters depth.
- Epiphyte A plant that grows on another plant.
- **Epipodium** A ridge or fold in the lateral edges of each side of the foot of certain gastropod mollusks.
- **Escapement -** The percentage of fish in a particular fishery that escape from an inshore habitat and move offshore, where they eventually spawn.
- **Estuary -** A partially enclosed body of water having a free connection with the open sea; within it salt water and fresh water mix.
- Etiology All the causes of a disease or abnormality.
- **Euphausiid** Shrimplike crustaceans that spend their entire lives in the sea; "krill".
- Extirpation Situation when something is no longer present.
- Exclusive Economic Zone (EEZ) The region from 3-200 nautical miles searward of the 48 contiguous states, Alaska, Hawaii, and U.S.-affiliated islands. The U.S. National Marine Fisheries Service (NMFS) regulates fisheries within this area.
- **Ex-vessel -** Refers to activities that occur when a commercial fishing boat lands or unloads a catch. For example, the price received by a captain for the catch is an exvessel price.
- FL See Fork Length.
- Falcate Shaped like a sickle.
- **Fathom -** A unit of measurement. One fathom equals six feet or 1.83 meters.
- Filter feed See Suspension Feed.
- Finfish A common term to define fish as separate from shellfish.
- **Fingerling -** A term commonly used for any juvenile fish, most commonly used for a life stage in trout and salmon. A fingerling is the stage after fry and before smolt.
- **Finlet -** Small fins located posterior to the anal and dorsal fins. Examples are found in the mackerels (family Scombridae).
- **Fishery -** All the activities involved in catching a species of fish or group of species.
- **Fishery-dependent -** Describes data about fish resources collected by sampling commercial and recreational catches.
- **Fishery-independent -** Describes data about fish resources collected by methods other than sampling commercial and recreational catches. An example of such a method is sampling in marine reserves.

- **Food chain -** A linear sequence of organisms in which each is food for the next member in the sequence.
- **Food web -** A network describing the feeding interactions of the species in an area.
- **Fork length -** The length of a fish as measured from the tip of its snout to the fork in the tail.
- **Front -** A major discontinuity separating ocean currents and water masses in any combination.
- **Fully utilized -** Situation when the amount of fishing effort used is about equal to the amount needed to achieve the LTPY.
- Gaff A pole with a large hook at its end.
- **Galactans -** Plant polysaccharides. Examples are agaragar and carrageenan.
- Gamete An egg or a sperm.
- **Gammarid** A member of the suborder Gammaridea and the order Amphipoda. Distinctive gammarid characteristics include that the first segment of the thorax is fused to the head and that they live in salt water, fresh water, and tropical forests. An example is the beach hopper.
- Gastropod A member of the class Gastropoda. Gastropods have a flattened foot, usually a cap-shaped or coiled shell, a mouth apparatus known as a radula, and are characterized by a twisting of the body, known as torsion. Examples include limpets, whelks, and periwinkles.
- Gastrula A stage in the development of a fertilized egg.
- **Gel chromatography -** A method for comparing DNA or genes of different organisms.
- **Genetic introgression -** The transfer of a small amount of genetic material from one (usually plant) species to another as a result of hybridization between them and repeated back-crossing.
- **Ghost fishing -** Situation when abandoned fishing gear continues to catch organisms.
- **Gillnet -** A curtainlike net suspended in the water with mesh openings large enough to permit only the heads of the fish to pass through, ensnaring them around the gills when they attempt to escape.
- **Gill rakers -** Bony, tooth-like structures on the anterior edges of gill arches. Used for protection or for straining out food.
- **Gonad -** Animal organs which produce gametes (eggs or spermatazoa). Female gonads are ovaries; male gonads are testes.
- **Gonosomatic index -** The ratio of the weight of a fish's eggs or sperm to its body weight. The index is used to dermine the spawning time of a species of fish.
- **Gravid -** Heavy with eggs or young.

- **Green mud** Greenish sand deposits in which glauconite is abundant.
- **Groundfish** A species or group of fish that lives most of its life on or near the sea bottom.
- **Gurdy -** Spool used in trolling upon which the fishing line is wound. The gurdies are usually powered, but on some of the smaller boats, like salmon dories, they are often hand-operated.
- Haplosporidian A member of the phylum Haplosporidia, which contains spore-forming parasitic protists. One member of this group, Haplosporidium nelsoni, also called MSX disease, has recently caused widespread disease in Crassostrea virginica, the eastern oyster, on the U.S. east coast.
- **Haplotype -** A set of genes that determines different antigens but are closely enough linked to be inherited as a unit.
- Haptera Basal outgrowths that form part of a holdfast.
- **Harvest -** The total number or poundage of fish caught and kept from an area over a period of time. Note that landings, catch and harvest are different.
- **Heterosis -** Segmentation in which the parts are different. Also, the tendency of cross-breeding to produce an animal or plant with a greater hardiness and capacity for growth than either of the parents; hybrid vigor.
- **Hermaphrodite** An individual with both male and female organs.
- **Histology -** A branch of anatomy that deals with the minute structure of animal and plant tissues as discernible with a microscope.
- **Holdfast** The rootlike structure at the base of an alga that attaches to rocky substrate.
- **Hydroacoustics -** Sound waves travelling through water.
- **Hydrography -** The arrangement and movement of bodies of water, such as currents and water masses.
- **Hydroid -** Benthic colonial cnidarians (a phylum that includes jellyfish, sea anemones and corals), some of which produce free-swimming jellyfish.
- INPFC International North Pacific Fisheries Commission.
- IWC International Whaling Commission.
- Immunodiffusion Any of several techniques for obtaining a precipitate between an antibody and its specific antigen. One technique is to suspend one in a gel and letting the other migrate through it from a well; another is to let both antibody and antigen migrate through the gel from separate wells to form an area of precipitation.
- **Intertidal -** Between the high and low tide marks and periodically exposed to air.

- **Isopods -** An order of crustaceans characterized by a small flattened bodies, sessile eyes, and both benthic and planktonic species.
- **Isotherm** An imaginary line passing through points on the earth's surface having the same mean temperature.
- Jetty A rocky structure constructed from land into the sea to protect shore-based property.
- **Jig -** An artificial lure made to simulate live bait. It is usually made with a lead head cast on a single hook and is heavier than most other lures.
- **Juvenile** A young fish or animal that has not reached sexual maturity.
- **Keystone species -** A species that maintains community structure through its feeding activities, and without which large changes would occur in the community.
- Knot A unit of speed equal to one nautical mile per hour (approximately 51 centimeters per second).
- LTPY Long-term potential yield.
- La Niña An episode of strong trade winds and unusually low sea surface temperature in the central and eastern tropical Pacific. The antithesis of El Nino.
- Lampara net An encircling net (similar to purse seine yet that does not close completely) used in shallow water.
- Landing The number or poundage of fish unloaded at a dock by commercial fishermen or brought to shore by recreational fishermen for personal use. Landings are reported at the points at which fish are brought to shore. Note that landings, catch, and harvest define different things.
- **Lateen -** A sailing rig used by early salmon fishing vessels off California.
- **Leader -** A length of monofilament or wire that connects the main fishing line to the hook used for capturing fish.
- **Limited entry -** A program that changes a common property resource like fish into private property for individual fishermen. License limitation and the individual transferable quota (ITQ) are two forms of limited entry.
- Limiting factor A factor primarily responsible for determining the growth and/or reproduction of an organism or a population. The limiting factor may be a physical factor (such as temperature or light), a chemical factor (such as a particular nutrient), or a biological factor (such as a competing species). The limiting factor may differ at different times and places.
- **Limnology -** The study of freshwater ecosystems, especially lakes.
- Littoral zone The intertidal zone.
- Longline See Setline.

- Long-term potential yield The maximum long-term average yield that can be achieved through conscientious stewardship, by controlling the proportion of the population removed by harvesting by regulating fishing effort or total catch levels.
- Lunate Refers to the caudal fin shape that is indented and looks like a crescent.
- MLMA Marine Life Management Act.
- MLPA Marine Life Protection Act.
- MMPA Marine Mammal Protection Act.
- MRFSS Marine Recreational Fisheries Statistics Survey.
- MSY See Maximum Sustainable Yield.
- **Macrophyte -** A plant that is large enough to be seen with the naked eye.
- Mariculture The raising of marine finfish or shellfish under some controls. Feed and ponds, pens, tanks or other containers may be used. A hatchery is also mariculture but the fish are released before harvest size is reached.
- Maturity The age at which reproduction is possible.
- **Maximum sustainable yield -** The largest average catch that can be taken continuously (sustained) from a stock under average environmental conditions. This is often used as a management goal.
- **Mean -** The sum of the data divided by the number of pieces of data; the average.
- **Median -** Within a data set, the median is the the number that divides the bottom 50% of the data from the top 50%.
- **Megalopa -** A larval stage of crabs that follow the zoea stages.
- **Meristem -** The point or region from which active growth takes place.
- **Mesohaline -** A zone of water from 1.8% salinity to .5% salinity.
- **Mesopelagic -** A somewhat arbitrary depth zone in offshore or oceanic waters, usually below 600 feet and above 3,000 (200-1000 meters).
- Metric ton 2200 pounds.
- **Midden -** A refuse heap left by prehistoric Native Americans, usually marking campsites.
- **Milt** A term for the sperm of fish such as salmon, trout, and herring.
- **Mollusk** A group of freashwater and saltwater animals with no skeleton and usually one or two hard shells made of calcium carbonate. Includes the oyster, clam, mussel, snail, conch, scallop, squid, and octopus.

- **Mooching -** A method of salmon fishing from a drifting or propelled boat. The bait is sunk deep with a heavy sinker then brought upward at an angle as the boat is maneuvered forward a few yards or the line retrieved. The bait is then allowed to sink once again to the bottom and the procedure repeated.
- Morphology The physical characteristics of an individual.
- **Myctophid** A member of the Myctophidae family of fishes. Commonly called lanternfishes, they are abundant in all oceans of the world, usually at 200-1000 meters depth.
- **Mysid** A member of an order of shrimplike crustaceans, mostly epibenthic.
- NEPA National Environmental Policy Act.
- NFMP Nearshore Fishery Management Plan.
- NISA National Invasive Species Act.
- NMFS National Marine Fisheries Service.
- NPDES National Pollutant Discharge Elimination System.
- **Nacre** A smooth, shining, iridescent substance forming the inner layer in many shells; mother-of-pearl.
- **Nekton -** Organisms with swimming abilities that permit them to move actively throught the water column and to move against currents. Examples include adult squid, fish and marine mammals.
- **Neuston -** Organisms that inhabit the uppermost few millimeters of the surface water.
- **Non-point source -** Sources of pollution such as general runoff of sediments, fertilizer, pesticides, and other materials from farms and urban areas as compared to specific points of discharge such as factories.
- Nudibranch Sea slug. A member of the mollusk class Gastropoda that has no protective covering as an adult. Respiration is carried on by gills or other projections on the dorsal surface.
- **Nursery -** Habitat suitable for protection and growth during an organism's early life stages.
- **Nutricline -** The depth zone where nutrient concentrations increase rapidly with depth.
- Oocyte An egg before the completion of maturation.
- **Oophagy -** The first young to "hatch" in each of the two oviducts proceed to eat the other embryos in the oviduct with them.
- **Open access -** A fishery in which no restrictions on entry or gear occur. Licenses may be required in an open access fishery, but if no quotas on fishermen exist the fishery is still considered to be open access.
- **Operculum -** The covering of the gills of a fish. Found in higher order fishes.

- Optimum yield The harvest level for a species that acheives the greatest overall benefits, including economic, social, and biological considerations. Optimum yield is different from maximum sustainable yield in that MSY considers only the biology of the species. The term includes both commercial and sport yields.
- Organic Deriving from living organisms.
- Otolith Calcareous concretions in the inner ear of a fish, functioning as organs of hearing and balance. There are three pairs of otoliths in the skull of each fish, and these are termed sagittae, lapilli, and asterisci. Otoliths are used by fishery biologists for numerous studies.
- Otter trawl A cone-shaped net that is dragged along the sea bottom. Its mouth is kept open by floats, weights and by two otter boards which shear outward as the net is towed.
- **Overfishing -** Harvesting at a rate greater than that which will meet the management goal.
- **Overutilized -** When more fishing effort is employed than is necessary to achieve LTPY.
- **Oviparous -** Producing eggs that hatch outside the female's body.
- Oviphagous Refers to an organism that consumes eggs.
- Oviposit To lay or deposit eggs, especially by means of a specialized organ, as found on certain insects and fishes.
- **Ovoviviparous -** Pertaining to an animal that incubates eggs inside the mother until they hatch.
- PFMC Pacific Fishery Management Council.
- PSMFC Pacific States Marine Fisheries Commission.
- PacFIN Pacific Fishery Information Network. A database containing West Coast fishing landings that is maintained by the Pacific States Marine Fisheries Commission.
- Palp Any of various sensory and usually fleshy appendages near the oral aperture of certain invertebrates.
- Papilla A nipplelike protuberance of the skin.
- Paranzella net A bag-shaped net towed by two vessels that run at various distances apart to keep the mouth open and at various speeds according to the depth desired. The paranzella net initiated the West Coast trawl fishery in 1876 but by World War II it had been replaced by the less expensive otter trawl.
- Parturition Birth.
- **Patchy distribution -** A condition in which organisms occur in aggregations.
- Pectoral fins Paired fins on the front lower sides of the chest.

- Pedicle In jointed brachiopods, a short stalk, composed mostly of tough connective tissue, that emerges through a hole or notch in the posterior part of the larger valve. Muscles that are inserted into the pedicle make it possible for an jointed brachiopod to change its orientation.
- **Pelagic -** Refers to fish and animals that live in the open sea, away from the sea bottom.
- Pelecypod A bivalve.
- Penaid Member of a family of shrimp, used in shrimp culture.
- Periostracum A protective layer of chitin covering the outer portion of the shell in many mollusks, especially freshwater forms.
- Pharyngeal Of, pertaining to, or connected with the pharynx.
- **Pharyngeal teeth -** Teeth developed on the pharyngeal bone in many fishes.
- Phycocolloid A colloidal substance obtained from seaweeds.
- **Phytoplankton -** Microscopic planktonic plants. Examples include diatoms and dinoflagellates.
- **Pinniped -** A member of the order of marine mammals that includes the seals, sea lions, and walruses, all having four swimming flippers.
- Piscivorous An organism that feeds on fish.
- **Planktivorous -** An organism that feeds on planktonic organisms.
- **Plankton -** Plants or animals that live in the water column and are incapable of swimming against a current.
- **Pleopod -** One of the swimming limbs attached to the abdomen in crustaceans.
- **Plug -** A nonspecific term for any artificial lure having a distinct "body" made of wood or plastic and having one or more sets of single, double, or triple hooks hattached. Most plugs are designed to wobble or create a commotion in the water when retrieved.
- **Pneumatocyst -** A gas-filled bladder at the base of each kelp blade that helps buoy the frond in the water column.
- **Point source -** Specific points of origin of pollutants, such as factory drains or outlets from sewage-treatment plants.
- Polychaete Marine segmented worms belonging to the phylum Annelida; some are planktonic, but most are benthic
- **Population -** Fish of the same species inhabiting a specified geographic area.
- **Potamodromous -** Refers to fish that migrate entirely within fresh water.

- Potential yield The yield estimated to be available for exploitation.
- **Procaryote -** A member of a group of unicellular organisms comprising the bacteria and the cyanophyceae, whose cell structures differs from all other organisms.
- **Productivity -** The rate at which a given quantity of organic material is produced by organisms.
- **Protandry -** An organism functions first as a male, then as a female.
- Protogynous Female in the first phase of one's life.
- Pteropod A holoplanktonic (permanent resident of the plankton community) snail having two swimming wings.
- **Purse seine -** A net that is cast in a circle around a school of fish. When the fish are surrounded, the bottom of the net is closed up, preventing escape.
- **RecFIN -** Recreational Fisheries Information Network.

  A database of the National Marine Fisheries Service (NMFS).
- Recruit An individual fish that has moved into a certain class, such as the spawning class or fishing-size class.
- **Recruitment -** A measure of the number of fish that enter a class during some time period, such as the spawning class or fishing-size class.
- **Red tide -** A red coloration of seawater caused by high concentrations of certain species of micro-organisms, usually dinoflagellates, some of which release toxins.
- **Reduction fishery -** Harvested fish are processed into fish meal, oils, or fertilizer.
- **Regime shift -** A long-term change in marine ecosystems and/or in biological production resulting from a change in the physical environment.
- **Riffle -** A shallow extending across the bed of a stream over which the water flows swiftly so that the surface of the water is broken in waves.
- Riprap Piles of rock used to support river banks.
- **River-run -** Describes upstream migration of anadromous fish.
- **Roller trawl** A trawl net equipped with rollers that enable the net to go over rocky areas without snagging.
- **Round haul net -** A net, such as a purse seine, that encircles schools of fish.
- Running-ripe A high state of reproductive readiness.
- Sac-roe Fish eggs that are encased in a clear membrane. Sac-roe are found in herring, among other species.
- **Salinity -** The total amount of dissolved material (salts) in seawater.

- **Salmonid -** A member of the Salmonidae family of fishes. Salmonids are the dominant fishes in the coldwater streams and lakes of North America, Europe, and Asia, where they support large recreational and commercial fisheries.
- **Satellite pop-up tag -** A specialized tag usually used to mark pelagic fish to study their migrations. Data from the tag is transmitted to researchers via a satellite.
- **Scaphopod** A member of the phylum Mollusca and class Scaphopoda which have an elongate conical shell and live buried within the sediment, feeding on foraminiferans and other small animals.
- **Scute** A type of sharp scale found on fish such as sturgeon and jackmackerel.
- **Sea wall -** Any solid structure onshore used to protect the land from wave damage and erosion.
- **Seed -** Juvenile shellfish, such as clams, oysters, and mussels.
- **Serological** An adjective referring to the branch of science dealing with the properties and reactions of blood sera.
- **Sessile** Referring to animals that are permanently attached to a substrate.
- **Set gillnet -** A gillnet that is anchored on both ends.
- Setline Fishing gear made up of a long main line attached to which are a large number of short branch lines. At the end of each branch line is a baited hook. When catching groundfish, setlines are laid on the seafloor. When catching swordfish, shark or tuna they are buoyed near the surface. Setlines can be twenty or more miles long. They are also called longlines.
- **Sexual dimorphism -** A phenomenon in which males and females differ markedly in shape, size, color, or other ways.
- Short ton 2000 pounds.
- **Single rig gear -** Refers to a boat using a single trawl net (instead of two trawl nets) when fishing for shrimp.
- **Simple random sampling -** A sampling procedure for which each possible sample is equally likely to be the one selected. A sample obtained by simple random sampling is called a simple random sample.
- **Skiff -** Any of various small boats, especially a flat-bottomed rowboat.
- **Slough -** A place of deep mud or mire. Also, a small backwater.
- Smolt A term for a specific life stage in salmonids. In anadromous populations parr (small active fish with series of bars on their sides) transform into silvery smolts and migrate to the sea. Once in the ocean (or

- large lakes), the smolts gradually become mature and return to their home streams for spawning.
- **Somatic cell -** All cells other than those in sexual gametes (egg and sperm).
- Spat A flat young oyster.
- **Spatfall -** Attachment of shellfish larvae to substrate where they develop into their adult forms.
- Spawn The term for reproduction in fishes.
- **Spermatophore -** An aggregation of sperm held together by gelatinous material, or a gelatinous packet of sperm which is inserted into or attached to the female as part of reproductive behavior.
- **Spinning gear -** A type of recreational fishing reel with an open spool on the front end.
- **Spoon -** An artificial lure with a curved or dished out body that wobbles but does not revolve. A spoon attracts fish by its movements as well as color.
- Sporophyte A plant that produces spores.
- **Stipe -** The stem-like part that connects the holdfast and blade of a frondose alga.
- **Stock -** A grouping of fish usually based on genetic relationship, geographic distribution, and movement patterns. Also a managed unit of fish.
- Stratified random sampling A sampling method in which one (1) divides the population into subpopulations (called strata), (2) obtains from each stratum a simple random sample of size proportional to the size of the stratum, and (3) uses all of the members obtained in step 2 as the sample.
- **Substrate** A solid surface on which an organism lives or to which it is attached (also called substratum); or, a chemical that forms the basis of a biochemical reaction or acts as a nutrient for microorganisms.
- **Subtidal zone -** The benthic zone extending from the low tide mark to the outer edge of the continental shelf.
- **Suspension feeder -** An organism that feeds by capturing particles suspended in the water column.
- **Sympatry -** The common occurrence of two taxa (closely related forms) in the same geographic area.
- TAC See Total Allowable Catch.
- TL Total length.
- **Telemetry -** The process of tracking movements of organisms using transmitting tags.
- **Territorial sea -** A zone extending seaward from the shore or internal waters of a nation for a distance of twelve miles (19.3 km) as defined by the United Nations Conference on the Law of the Sea (UNCLOS). The coastal

- state has full authority over this zone but must allow rights of innocent passage.
- Test The shell of a sea urchin.
- **Thermocline -** The water layer in which temperature changes most rapidly with increasing depth.
- **Threatened species -** A classification under the Endangered Species Act. A species is considered threatened if it is likely to become an endangered species in the foreseeable future through a significant portion of its range.
- **Tidal prism -** The volume of water between the high tide level and low tide level.
- **Total allowable catch (TAC) -** The annual recommended catch for a species or species group. The regional fishery management council sets the TAC from the range of the allowable biological catch.
- **Trammel net -** An entangling net that hangs down in several curtains.
- **Trawl -** A sturdy bag or net that can be dragged along the ocean bottom, or at various depths above the bottom, to catch fish.
- **Trematode** Any of a class (Trematoda) of parasitic flatworms including the flukes.
- **Trocophore -** A free-swimming larval stage of polychaete worms and some mollusks, characterized by having bands of cilia (hair-like structures) around the body.
- **Troll -** To trail artificial or natural baits behind a moving boat. The bait can be made to skip along the surface or trailed below at any depth to just above the bottom. A bait or lure trailed behind an angler walking along a pier, bridge, or breakwater is also called trolling.
- **Trophic level -** The nutritional position occupied by an organism in a food chain or food web; e.g. primary producers (plants); primary consumers (herbivores); secondary consumers (carnivores), etc.
- **Tunicate -** Sessile benthic animals belonging to the phylum Chordata.
- **Turbidity -** Reduced visibility in water due to the presence of suspended particles.
- **Underutilized -** When more fishing effort is required to achieve the LTPY.
- **Upwelling -** A rising of nutrient-rich water toward the sea surface.
- **VPA -** See Virtual Population Analysis.
- **Vector -** A physical quantity that has magnitude and direction. Examples are force, acceleration, and velocity.
- Veliger A free-swimming larval stage of mollusks.
- Velum A ciliated, sail-like appendage of a veliger larva.

- **Ventral fins -** Paired fins on the lower part of the body; they may be near the anus, below the pectoral fins, or near the throat. They are also called pelvic fins.
- Virtual population analysis (VPA) A type of analysis that uses the number of fish caught at various ages or lengths and an estimate of natural mortality to estimate fishing mortality in a cohort. It also provides an estimate of the number of fish in a cohort at various ages.
- **Viviparous -** Bringing forth living young, rather than being an egg-layer.
- **Water column -** The water from the surface to the bottom at a given point.
- Weir A low dam or barrier made across a water channel to raise the level of water for different purposes. Also, a barricade.
- Wrack zone A bank of accumulated litter at the strandline.
- YOY Young-of-the-year.
- **Year-class -** The fish spawned and hatched in a given year, a "generation" of fish.
- **Zoea -** A planktonic larval stage of crabs with characteristic spines on the exoskeleton.
- Zooplankton Animal members of the plankton.
- **Zoospore** A motile spore with one or more flagella or cilia by the vibration of which it swims.

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