

Glossary Seabirds

Workshop, May 30, 2009

A acclimatization – the gradual adjustment of the body to new climatic or other environmental conditions, for example, the adjustment to low levels of oxygen at high altitudes.

adaptation – reduction of vulnerability of natural and human systems against change.

algae – single-celled, multi-celled or colonial marine or freshwater plants that contain chlorophyll; they don't have true roots, stems or leaves and also do not flower or contain seeds.

anthropogenic – generated by the actions of humans.

apex predator – an organism (predator) that has virtually no predators of its own, occupying one of the top spots in its particular food web.

autotroph – organisms that are able to produce their own food through processes such as photosynthesis.

B baseline – measurable quantities from which an alternative outcome can be measured.

bill (or beak) – the usually hard structure surrounding the mouth on a bird. It acts as the major manipulative structure of most birds, allowing the preparation of food for swallowing.

biodiversity – range or variety of all organisms and ecosystems.

breast – the upper front of the bird. The flight muscles are located underneath the breast.

brooding – immediately after hatching, the chick requires protection from the elements (e.g., heat, cold) and predators - during the brooding (or brood guard) stage of the breeding season, one albatross parent always remains with the chick at the nest.

C catch basin – any place or drain that receives run-off from natural or man-made surfaces.

cheek – (in birds) the side of the head below the eye and eye stripe.

chemical pollution – the introduction of toxic substances into an ecosystem, e.g., acid rain, contamination of water supplies by pesticides.

chin – (in birds) the area on the front of the neck, under the bill, which includes the gular area (directly under the bill) and the throat (below the gular area).

copepod – a planktonic crustacean that can be found almost wherever water is available (both fresh and marine), however, most are found in the marine environment. Also famous for being SpongeBob's nemesis "Plankton" on the cartoon show.

crissum – (in birds) the area around the vent (cloacal opening) in front of the undertail coverts.

Some terms adapted from:

algalita.org/pdf/Glossary.pdf and www.interakty.com/hirdanat/anat.html



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crown – the top of the head; in many species of birds, the crown may have a crest of feathers or a spot of bright color.

D debris – also termed marine litter, is defined as any *that does not naturally occur in the marine environment*, including articles that have been made or used by people and deliberately discarded or accidentally lost.

E ecosystem – relationships between and among living organisms and their non-living environment.

eddy – small volume of air (or any fluid) that behaves differently from the larger flow in which it exists.

El Niño – appearance of unusually warm waters in the eastern Pacific; termed the "Christ child," because of the time of year it effects the South American coastline. **ENSO** - acronym for El Niño Southern Oscillation. ENSO occurs when the easterly equatorial surface winds weaken, or reverse and the warm water in the western equatorial Pacific Ocean moves to the central and eastern Pacific Ocean. This flow is accompanied by heavy rainfall along the coast of Peru, California and Mexico.

Environmental Protection Agency (EPA) – an independent executive agency of the federal government, established in 1970, responsible for the formulation and enforcement of regulations governing the release of pollutants, to protect public health and the environment.

F feathers – made of the same material as our nails, skin and hair, keratin, birds have two types of feathers – contour and down feathers. Strong, lightweight contour feathers cover the body and wings and aid in flight. The down feathers insulate the bird and keep it warm. Feathers are also used to protect the bird's skin as well as streamline the body and are important in courtship displays.

flank – the area of the side usually visible when the bird is perched or sitting on the ground.

fledge – when the hatched chick is mature enough to leave the nest and its dependence on its parents for food.

I incubating – to protect and keep an egg warm by sitting on it.

invasive species – non-native plant and animal species that have been introduced to an area where they do not occur naturally.

L littoral zone – area of shore between mean high water and mean low water.

M marine climate – climate dominated by the ocean, because of the moderating effect of water, sites having this climate are considered relatively mild.

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marine debris – any trash, natural or man-made, that is found in the marine environment.

N nonpoint source pollution – contaminated runoff originating from an indefinite or undefined place, often a variety of places (e.g., farms, city streets, parking lots, yards, construction site, etc.)

O outfall – an opening at the end of a storm drain system that allows water to flow into a channel, lake, river, bay or ocean.

P pair bond – two mated animals that mate for life.

pelagic – the open area of the ocean that is not associated with the sea floor or coastline.

photosynthesis – process in green plants and certain other organisms by which carbohydrates are synthesized from carbon dioxide and water using light as an energy source. CO₂ and H₂O are combined in the presence of sunlight and the green pigment chlorophyll, to produce food (C₆H₁₂O₆) and O₂.

phytoplankton – microscopic plants that photosynthesize and create organic matter using energy from the Sun.

plankton – small or microscopic organisms, including algae and protozoan, that float or drift in great numbers in fresh or salt water, especially at or near the surface, and serve as food for fish and other larger organisms.

point source pollution – pollution that originates from a specific place such as an oil refinery or a paper mill.

pollution – a human or naturally caused change in physical, chemical or biological conditions that result in undesirable effects on the environment; contamination of air, soil or water by the discharge of harmful substances.

primaries – (in birds) the longer outer feathers of the wing. Provides some lift and much of the maneuvering ability of the bird, attached to the hand bones.

primary productivity – the rate at which energy is converted by autotrophs to organic substances.

pygostyle – (in birds) a bone which is attached to the last vertebra in the spinal column. The tail feathers are attached here.

R runoff – water that flows over land surfaces and does not percolate (sink) into the ground.

S salinity – a measure of the quantity of dissolved salts in ocean water. About 90% of that salt is sodium chloride. The other major dissolved salts in sea water are chlorine, sodium, magnesium

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sulfur and potassium. Ocean water is about 3.5% or 35 ppt salt.

seabird – birds that have adapted to life within the marine environment.

sea surface temperature (sst) – temperature of the ocean's surface used in collaboration with other data to predict an El Nino occurrence.

secondaries – (in birds) the major lifting feathers, between the primaries and the body, attached to the ulna.

skeleton – birds have strong skeletons with relatively few, small bones. Some of the bones are hollow, thin or flat, which makes them flexible and light. Some are even fused (joined together) to give the skeleton extra strength. Their lightweight frames allow birds to be light enough to get off the ground and stay in the air.

T tail – (in birds) the feathers attached to the pygostyle, used for stabilization in flight, display in courtship, etc.

thermal pollution – varying temperatures above or below the normal condition (e.g. power plant turbine heated water).

U undertail coverts – (in birds) covers the base of the tail feathers.

upwelling – the upward motion of sub-surface seawater toward the surface of the ocean. This is often a source of cold, nutrient-rich water. Strong upwelling occurs along the equator where easterly winds are present. Upwelling also can occur along coastlines, and is important to fisheries in California and Peru.

W watershed – an area that is drained by rivers and streams and includes geographical structures like mountains, valleys and man-made structures like buildings, parking lots and highways, but that also include a rich biodiversity that is supported by the ecosystems within.

wing bar – (in birds) a stripe of color on the folded wing. Often white or yellow when present, may be either the tips of the wing coverts or near the bases of the secondaries.

wing coverts – (in birds) the feathers at the leading edge of the wing, covering the bases of the secondaries and primaries.

Z zooplankton – a heterotrophic type of plankton. Most are microscopic in size, but some are large enough to be seen with the unaided eye (jellies, salps, etc.).