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Persistence of benthic invertebrates in polluted sediments.

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GLOSSARY

- ABIOTIC** - the non-living or physical components of the environment
- ANOXIA** - deprived of oxygen
- ANTHROPOGENIC** - involving the impact of people on nature; induced, caused or altered by the presence and activities of people, as in water and air pollution
- BACTERIAL FATTY ACIDS** - fatty acids of bacterial origin
- BENTHIC** - referring to organisms living in or on the bottom of a water body
- BIOTIC** - the living components of the environment, or products derived from living components; e.g. detritus
- BIOTURBATION** - disturbance of sediments caused by biological activity
- CHARACTER DISPLACEMENT** - the condition in which two interacting species are evolutionary diverged
- COLLECTOR** - invertebrates that feed on decomposing organic matter either from the water column (filterers) or from the bottom (gatherers)
- COMMENSALISM** - the association between two organisms of different species that live together and share food resources, one species benefiting from the association and the other not being harmed
- COMMUNITY** - natural, intermingled plant or animal populations which share a given space, compete for resources, and interact with one another in an ecosystem
- DECOMPOSITION** - breakdown of complex organic materials into simpler materials mainly by micro-organisms
- DETRITIVORE** - organism that feeds on detritus
- DETRITUS** - small pieces of dead and decomposing plants and animals
- DISTURBANCE** - a discrete event which removes, damages, or impairs the normal function of organisms
- DIVERSITY** - the number and variety of organisms in a community or ecosystem
- ECOSYSTEM** - a community of different species interdependent on each other together with their abiotic environment, which is relatively self-contained in terms of energy flow, and is distinct from neighbouring communities.
- EMERGENCE** - to leave water and undergo metamorphosis into an adult
- EUTROPHIC** - enrichment of water bodies by inorganic plant nutrients (e.g. nitrate, phosphate) resulting in overgrowth of algae, frequently followed by algae die-offs and oxygen depletion
- FATTY ACIDS** - a long chained organic acid, serves as a constituent of lipids and a fuel molecule in cells

Persistence of benthic invertebrates in polluted sediments

FLOODPLAIN – land next to a stream or river which is flooded during high-water flow with a predictable, normally seasonal frequency

FUNCTIONAL GROUP - refers to any group of aquatic invertebrates that have developed specific morphological features that allow them to feed in a certain manner (e.g., invertebrates that have developed rasping mouthparts for scraping algae and other material from surfaces are part of the functional feeding group known as scrapers), see also collector.

HABIT - normal or regulatory behaviour of an animal

HABITAT - area or environment in which an organism or community lives

HEMIMETABOLOUS - insects having an incomplete metamorphosis, with no pupal stage in the life history

HOLOMETABOLOUS - insects that undergo a full metamorphosis, with a four stage life history (egg, larvae, pupa, and adult)

HYPOXIA - low levels of oxygen

IN SITU - in the original place

INSTAR - interval between successive moults of exoskeletons in arthropods

INTERSPECIFIC COMPETITION - competition between distinct species

INTRASPECIFIC COMPETITION - competition within a species

INVERTEBRATE - animals without backbones

LARVA - in insects, an immature form that is markedly different in form from the adult and which undergo metamorphosis into the adult form

LENTIC HABITATS - non-flowing or standing body of freshwater such as a lake or pond

LOTIC HABITATS - flowing body of freshwaters such a river or stream

MACROPHYTES - large multi-cellular photosynthetic organisms

MULTIVOLTINE - having more than one generation in a year

NEOZOAN - non-native species that is introduced into an area

NUTRIENT - any substance, element, or compound necessary for the growth used or required by an organism as food

NYMPH – a juvenile form without wings or with incomplete wings in insects with incomplete metamorphosis

OLIGOTROPHIC - inadequate nutrition

OPPORTUNISTIC SPECIES - species which exploit diverse aspects of the environment as conditions change, flexible in life requirements and generalists by nature, are able to quickly adapt to temporarily available resources such as food supplies

ORGANIC COMPOUNDS - compound containing carbon (e.g. PAHs, PCBs)

ORGANIC MATTER -see detritus

PELAGIC - referring to in the water column

PHYTOPLANKTON - unicellular photosynthetic organisms

- POLLUTION** - any harmful or undesirable change in the physical, chemical, or biological quality in air, water, or soil as a result of the release of e.g. chemicals, radioactivity, heat, large amounts of organic matter
- POPULATION** - group of organisms of the same species living in a certain area
- POLYCHLORINATED BIPHENYLS (PCBs)** - large group of toxic synthetic lipid-soluble chlorinated hydrocarbons, which are used in various industrial processes and which have become persistent and ubiquitous environmental contaminants which can be concentrated in food chains
- POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)** - group of compounds found in e.g. coal tar and cigarette smoke
- POLYUNSATURATED FATTY ACIDS** - fatty acids with more than one C=C double bond in their hydrocarbon chain
- RESOURCE PARTITIONING** - division of scarce resources in an ecosystem so that species with similar requirements use the same sources at different times, in different ways, or in different places
- SPECIALIZED SPECIES** - species which can survive and thrive only within a narrow range of habitat and/or environmental conditions, or which can use only a very limited range of food, and is therefore usually less able to adapt to changing environmental conditions
- SPECIES-SPECIFIC** - inborn in a species, not modified by learning
- TAXON (TAXA)** - a taxonomic group of any rank, including all the subordinate groups; any group of organisms, populations or taxa considered to be sufficiently distinct from other such groups to be treated as a separate unit; a taxonomic unit
- TOLERANCE** - the ability to survive and grow in the presence of a normally toxic substance, or the ability to survive and grow within a range of an environmental variable
- TRAIT** - distinct characteristic of a species, which may be either heritable, environmentally determined, or both
- TROPHIC LEVEL** - level in a food chain defined by a method of obtaining food, and in which all the organisms are the same number of energy transfers away from the original source of the energy
- TROPHIC STATE** - the nutrient status of water; e.g. eutrophic, oligotrophic
- UNIVOLTINE** - having only one generation in a year
- XENOBIOTIC** - foreign to a living organism, foreign substances

