

Glossary

Abdomen – Refers to the tail of a crawfish. Used in locomotion and swimming. Peeled after cooking for consumption.

Age class – Also synonymous with size class, recruitment class. Generally refers to pulses or “waves” of crawfish hatched around the same time. For example, if large numbers of crawfish were hatched and released into the water in the first two weeks of October and the last two weeks of November, two age classes of juvenile crawfish would be in the pond. (Also see “Recruitment.”)

Agronomic – Refers to terrestrial plant agriculture.

Aquaculture – Cultivation of aquatic organisms in a controlled and managed environment.

Baffle levees – Small levees built within the interior of a crawfish pond to direct water flow when pumping water into ponds. They also serve as reproductive burrowing area for crawfish.

Biomass – The weight of all the organisms forming a given population or inhabiting an environment. Can also be used to describe the total quantity or weight of plants, as in biomass of the forage crop.

BMP – “Best Management Practices”; procedures followed by agricultural producers to control the generation and delivery of pollutants from agricultural activities into water resources of the state thereby reducing the amount of agricultural pollutants entering surface and ground waters.

Best management practices – see “BMP.”

Burrow – A hole or excavation in the ground made by a crawfish for reproduction, shelter and habitation.

Broodstock – Reproductively active adults or immature sub-adults obtained for breeding.

Cannibalism – Eating of a crawfish by another crawfish. Crawfish are most vulnerable to cannibalism after molting.

Carapace – External upper shell of a crawfish.

Clay loam – A soil that consists of about 20% to 45% sand and 27% to 40% clay.



The fossil record suggests that crawfish and their relatives have been around for 285 million years.



The red swamp crawfish (rear) and white river crawfish (front) are closely related and often occur side-by-side, but natural hybrids between the two have never been documented.

Count per pound – Number of crawfish that equals 1 pound in weight. Often referred to as simply “count.” For example, 20-count per pound crawfish or 20-count crawfish will consist of 20 crawfish that collectively weigh 1 pound.

Crop rotation – Agronomic term that refers to growing a different agricultural crop following the harvest of a crop, usually in the same field. Growing crawfish in a rice field following the harvest of rice grain is an example of a crop rotation.

Density – Number of individual crawfish per unit space area.

Density dependent growth – A term that means that the growth rate of a crawfish is dependent on the overall population density of crawfish in the pond. The higher the density the slower the growth and vice-versa.

Detritus – Organic debris from decomposing plant and animal material. Detritus has many microorganisms and can be used a food by crawfish directly or is used as food by other organisms that crawfish eat.

Detritivores – Organisms that eat detritus.

Dewatering – To remove water from a pond or field by draining.

Dissolved oxygen – Oxygen gas dissolved in water and is required by crawfish for respiration and survival. Often referred to as “DO.” Low dissolved oxygen is detrimental to the health and survival of crawfish.

Ecosystem – A community of organisms, interacting with each other, plus the environment in which they live and with which they also interact.

Effluent – Water that is discharge or released into the environment from a crawfish pond. Also referred to as “tailwater.”

Epiphytic organism – Refers to organisms growing on the outside of a plant, not as parasites, but as using it for support. For example, algae growing on the outside of a rice plant is an epiphytic organism.

Exoskeleton – External shell covering the outside of a crawfish.

Fallow – Usually refers to cultivated land that is allowed to lie idle following the harvest of another crop.

Fat – Common reference for the hepatopancreas. Sometimes referred to by scientists as the digestive gland or organ.

Fecundity – Number of mature eggs or oocytes in a female crawfish just prior to spawning.

Formulated feed – A food that is manufactured from various ingredients and meets most, or all, of the nutritional requirements of an animal. It may also be referred to as manufactured feed.

Filter strip – Usually refers to a vegetated strip of land through which or over which effluent or tailwater can flow to remove suspended matter and nutrients.

Flushing – To replace all or a portion of water in a pond, usually in an attempt to increase the dissolved oxygen content.

Food chain – Chain of organisms through which nutritional energy is transferred. Each link in the chain feeds on and obtains energy from the one preceding it and in turn it is eaten by and provides energy for the one following it.

Food web – All the food chains in a crawfish pond make up the food web.

Gastroliths – Two small mineral stones found in the stomach lining of a molting (soft) crawfish. They consist largely of calcium minerals that are extracted from the old shell prior to molting. The gastroliths dissolve as the crawfish hardens to return calcium to the newly formed shell.

Genotype – The genetic makeup of a particular organism.

Germination – Process by which a seed sprouts.

Habitat – The environment where a plant or animal normally lives and grows.

Hatchlings – Refers to juvenile crawfish as they emerge from hatched eggs. They may be referred to as “hatchlings” for several weeks.

Hepatopancreas – A glandular organ in a crawfish that aids in the digestion of food. It has the same function as the liver and pancreas and acts as a reserve for stored energy. It supplies a significant amount of nutritional energy to crawfish when they are in burrows, and it is also important in crawfish reproduction. In southern Louisiana it is commonly referred to as “fat.”



On extremely flat lands, water can be circulated and aerated using paddlewheels designed for catfish production.



Natural surface waters provide a resource for flooding and flushing crawfish ponds in many parts of the state.

Herbivores – Organisms that eat plants.

Holdover crawfish – Crawfish that survive the previous production season, successfully burrow, and can be found in the current season’s crawfish crop. Holdover crawfish may be mature or immature.

Hybrids – Animals or plants resulting from the cross of parents that are genetically different, as in a cross of two different species.

Hydrological cycle – As it relates to crawfish production in Louisiana, the hydrological cycle refers to the annual summer low water and spring high water cycles in Louisiana’s Atchafalaya River Basin on which the annual wild crawfish crop is predicated.

Hypothesis – A tentative assumption made from an interpretation of a practical situation or condition.

Invertebrate – A collective term for all animals that do not have vertebrate (spinal column).

Intercropping – Growing of two or more different crops in the same field simultaneously. For example, relaying stunted crawfish into the same field as an actively growing rice crop is an example of an intercropping system.

Intermolt – Stage in the molting cycle of crawfish between the post-molt and next pre-molt stage. In the intermolt stage the crawfish does not increase measurably in length but will increase in tissue weight with proper nutrition and environmental conditions.

Juveniles – A term used to refer to crawfish that have not yet attained sexual maturity or adult stage.

Levee – An earthen embankment for impounding or holding water.

Intermittent harvesting – A process in which crawfish are harvested intensely for several or more days followed by a rest period of several days or more in which no harvesting occurs to allow for additional growth in individual crawfish.

Life cycle – The series of stages an organism passes through during its lifetime.

Lodging – The leaning or falling over of plants, particularly cultivated crops like rice or sorghum-sudangrass.

Metabolism – The general chemical processes occurring within a living organism.

Microorganism – Microscopic organism; a unicellular plant, animal or bacterium.



The three-funnel pyramid trap represented an important innovation in trap design and harvest efficiency. The version pictured here has since been replaced by newer variations on this design, using square mesh wire and plastic collars which also serve as handles.

Molting – To shed or cast off the old exoskeleton periodically to allow the body to grow.

Monocropping – Cultivation of a single agricultural or aquacultural crop in a field or pond. Also known as “monoculture.”

Noxious weeds – Nondesirable plants present in crawfish ponds or agricultural fields; examples include cattails, indigo weed, water lilies.

Omnivores – Organisms that eat both plant and animal matter. Crawfish are considered to be omnivores.

Organic – Any material derived from living organisms.

Ovary – The organ in female crawfish that produces ova or eggs.

Oxygen demand – Oxygen consumed in respiration by all organisms in a crawfish pond. The higher the oxygen demand the more difficult it is to maintain oxygen levels in the water. Also commonly referred to as “Biochemical Oxygen Demand” or “BOD.”

pH – A measure of the acidity or alkalinity of soil, water or solution. Values range from 0 to 14 with 7 being neutral, less than 7 is acidic and above 7 is alkaline.

Pathogen – A specific agent or organism that causes infectious disease in crawfish.

Perimeter levees – The larger levees that define the outside boundary of a crawfish pond. Perimeter levees are usually higher and wider than interior baffle levees.

Pesticide – A chemical or biological agent used to destroy pests. Pesticides include fungicides, herbicides and insecticides.

Plankton – Microscopic plants and animals present in water.

Population dynamics – A term that refers to the rates of abundance, reproduction, growth and mortality in crawfish populations.

Population structure – A term that refers to the age, size and number of crawfish in a pond population.

Procambriid – A taxonomic classification term that includes both the red swamp crawfish and white river crawfish. Other species of crawfishes are procambriids in Louisiana and elsewhere.

Purging – Process of cleaning crawfish by water immersion or spray immersion to empty the intestinal (gut) contents of fecal material as well as removing mud and grit from the gill cavity.

Ratoon – Refers to the regrowth of rice plant from the stalks after grain harvest.

Recruitment – Entry of young-of-the-year crawfish (“recruits”) into the population as they leave their mother when she emerges from a burrow and enters the open water of a pond. Pulses of recruits that enter the population throughout the various months in a production season are referred to as “recruitment waves” or “waves of recruitment.” (Also see “age class.”)

Relaying – The process of transferring small crawfish from ponds deficient in food into other ponds or fields with few crawfish, and where food is abundant, to stimulate growth.

Senescence – The process of aging leading to death after the completion of growth in plants.

Silty clay – A soil that consists of about 40%-60% silt and 40%-60% clay.

Set-time – The number of hours that a baited crawfish trap is left in the water to catch crawfish before being emptied and re-baited. Usually trap set times are approximately 24 or 48 hours. May also be referred to as “soak-time.”

Specimen – An individual considered typical of a group.

Spawn – To produce and deposit eggs in the reproduction process.

Standing stock – Refers to either the number or weight of crawfish in a pond or field at any particular moment in time.

Stunting – A term that refers to a significant reduction in the growth of a population of crawfish, usually associated with high density and deficient food resources.

Suspended sediments – Clay, silt, sand particles suspended in water.

Swimmerets – Small appendages under the abdomen (tail) of a crawfish that function in locomotion and reproduction. Eggs when laid are attached to the swimmerets. (Also known as “pleopods.”)

Terrestrial grasses – Volunteer (nonplanted and noncultivated) grasses of nonaquatic origin that usually grow in the pond during the summer dry period when no water is present.

Toxicant – A toxic compound.

Tailwater – Water that is discharged or released into the environment from a crawfish pond. Also referred to as “effluent.”

Turbidity – Opacity in water caused by suspended particles from bottom muds or organic matter such as plankton.

Wetland – A land or area containing a significant amount of soil moisture. The federal government has specific criteria for defining wetlands that are used in regulatory matters.

Young-of-the-year – A term that refers to hatchling or juvenile crawfish hatched within the current crawfish production season.

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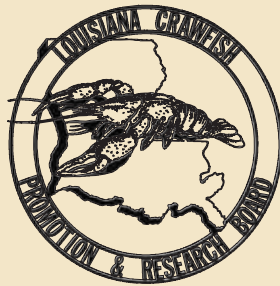
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Acknowledgments

This publication was partially funded by the **Louisiana Crawfish Promotion and Research Board**, as was much of the research reflected in these recommendations.



The authors would like to acknowledge the contributions of **Mr. Laurence W. de la Bretonne Jr.**, **Dr. James W. Avault Jr.** and **Dr. Jay V. Huner** to the development of Louisiana's crawfish farming industry.

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Mr. de la Bretonne and Drs. Avault and Huner were all recognized as international authorities on the culture of Louisiana crawfish and all influenced to a large degree the development of crawfish farming in Louisiana as we know it today.





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Pub. 2637

(4M)

1/07

Issued in furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.

