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### Commentary

# AQUATIC MOLLUSCA FRESHWATER PULMONATION AND ITS REPRODUCTION ADAPTATIONS

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#### INTRODUCTION

Gastropods are one of the foremost diverse groups of animals both in form habit and habitat. They are by distant the biggest group of molluscs, the gastropods, commonly known as snails and slugs, have a place to a expansive ordered course of spineless creatures inside the phylum Mollusca called Gastropoda. This course comprises snails and slugs from saltwater, from freshwater, and from the land.

A few familiar and better known gastropods are earthbound gastropods. A few live in new water, but most named species of gastropods live in a marine environment. In habitats where not sufficient calcium carbonate is accessible to construct a very strong shell, such as on a few acidic soils on arrive, various species of slugs happen, conjointly a few snails with lean, translucent shells, generally or totally composed of the protein conchiolin [1]. Snails are recognized by an anatomical process known as torsion, Torsion is show in all gastropods, but the opisthobranch gastropods are secondarily untorted to different degrees, torsion happens in two stages. The primary, mechanistic stage is muscular and the second is mutagenetic. The impacts of torsion are essentially physiological; the living being creates an asymmetrical development, with the majority happening on the left side. Gastropods ordinarily have a well defined head with two or four sensory limbs with eyes, and a ventral foot, The first division of the foot is called the propodium [2]. Its work is to thrust absent sediment as the snail crawls, larval shell of gastropod is called a protoconch.

Most shelled gastropods have a one piece shell, regularly coiled or spiraled, at least within the larval stage. This coiled shell generally opens on the right hand side. Various species have an operculum, which in numerous species acts as a trapdoor to shut the shell [3]. This can be usually made of a horn like fabric, but in a few molluscs it is calcareous. Within the land slugs, the shell is diminished or missing, and the body is streamlined. The tactile organs of gastropods incorporate olfactory organs, eyes, statocysts and mechanoreceptors, gastropods have no hearing. In earthbound gastropods, the olfactory organs, found on the tips of the four limbs, are the foremost pivotal sensory organ. The chemosensory organs of opisthobranch marine gastropods are called rhinophores [4]. The larger part of gastropods have

basic visual organs, eye spots either at the tip or base of the appendages. In any case eyes in gastropods run from simple ocelli that only recognize light and dark, to more complex pit eyes, and indeed to focal point eyes. The anxious system of gastropods incorporates the peripheral nervous system and the central nervous system. The central nervous system comprise of ganglia associated by nerve cells [5].

The radula of a gastropod is ordinarily adjusted to the nourishment that a species eats. The best gastropods are the limpets and abalones, herbivores that utilize their hard radula to rasp at seaweeds on rocks. Numerous marine gastropods are burrowers, and have a siphon that expands out from the mantle edge. In some cases the shell incorporates a siphonal canal to suit this structure. A siphon empowers the animal to draw water into their mantle cavity and over the gill. Nearly all marine gastropods breathe with a gill, but numerous freshwater species, and the majority of terrestrial species, have a pallial lung. The gastropods have open circulatory system and they transport liquid is hemolymph. Hemocyanin is show within the hemolymph as the respiratory color. The foremost characteristic of the Gastropoda is the asymmetry of their principal organs. Marine gastropods incorporate few that are herbivores, debris feeders, predatory carnivores, foragers, parasites, conjointly many ciliary feeders, in which the radula is diminished or truant. Land dwelling species can chew up clears out, bark, fruit and decomposing creatures whereas marine species can rub algae off the rocks on the seafloor.

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