南美肺鱼

现生肺鱼中的呼吸特化代表

南美肺鱼是南美洲唯一一种现生肺鱼，主要栖息在亚马孙河、巴拉圭河及巴拉那河流域的沼泽和静水中。外形酷似大型鳗鱼或蝾螈，最大体长可达1.25米。成体的腮呼吸功能明显退化，具有发达的成对肺，必须定期到水面呼吸空气。与非洲肺鱼结茧夏眠的策略不同，当旱季来临时，南美肺鱼会钻入30至50的厘米深泥层，用泥土封堵泥洞顶部，仅保留若干呼吸孔，在洞穴内依靠低代谢和肺呼吸度过旱季。

Lepidosiren paradoxa

A Respiratory Specialist Among Living Lungfishes

The South American lungfish is the only extant lungfish species in South America. It mainly inhabits swamps and still waters in the Amazon, Paraguay, and Paraná river basins. Its body resembles a large eel or salamander, reaching up to about 1.25 m in length. Its gills are highly reduced, and respiration depends largely on a pair of lungs that take oxygen directly from the air. Thus it must regularly surface to breath air. Unlike African lungfishes, which form a mucus cocoon during aestivation, the South American lungfish burrows 30–50 cm into the mud when the dry season arrives, seals the top of the burrow with mud while retaining a few breathing openings, and survives by lowering its metabolism and breathing with its lungs.