Meet the creatures that thrive in the dark

Notes & Cues: Article: The pale-throated sloth, from the northern Amazon forests, has evolved in an unusual way to survive the dangers of swinging through trees in total darkness. The nocturnal bear-like creature has developed a sense of smell so sensitive it can tell whether branches nearby are emitting whiffs of sap or not. "That allows them to swing only on to branches that are healthy," said Professor Geoff Boxshall of the Natural History Museum in London. "They can avoid grabbing one that is sapless and dead, which might break, causing them to fall out of a tree and injure themselves." Another remarkable creature of the night is the blind aquatic salamander Proteus anguinus - or olm. These animals spend their lives in total darkness in caves in central and south-eastern Europe. They grow up to 30cm long, can live for up to a century and have no vision – instead they have evolved a technique for detecting the bioelectric fields of their main prey, cave shrimps, so they can hunt in total darkness. "Our own senses are utterly dominated by information from our eyes, but countless other creatures can happily survive without this input. Their approach to lack of light gives us a new way to explore nature." However, the Stygian world that shelters these creatures is under threat. As humanity spreads, we carry light pollution with us. For example, the nocturnal boat-billed heron of Peru and Brazil will not eat in the presence of any light source, and this is a growing problem as urbanisation spreads. "Life in the dark is a delicate business," Boxshall concludes. "We should not take it for granted."

Summary: