Locomotion

Arboreal habitats pose numerous mechanical challenges to animals moving in them, which have been solved in diverse ways. These challenges include moving on narrow branches, moving up and down inclines, balancing, crossing gaps, and dealing with obstructions. 6b81b59d98 == History == 6b81b59d98 == Environmental interactions == 6b81b59d98 Motion (physics) 6b81b59d98 Animals move for a variety of reasons, such as to find food, a mate, a suitable microhabitat, or to escape predators. For many animals, the ability to move is essential for survival and, as a result, natural selection has shaped the locomotion methods and mechanisms used by moving organisms. For example, migratory animals that travel vast distances (such as the Arctic tern) typically have a locomotion mechanism that costs very little energy per unit distance, whereas non-migratory animals that must frequently move quickly to escape predators are likely to have energetically costly, but very fast, locomotion. 6b81b59d98 Anguilliform, in which a wave passes evenly along a long slender body; 6b81b59d98 The museum was opened on 22 October 2004 by then Prime Minister and local MP Tony Blair. Built at a cost of £11.3 million, it is based on the former "Timothy Hackworth Victorian Railway Museum". The museum is operated in partnership with Durham County Council and was expected to bring 60,000 visitors a year to the small town. It exceeded expectations, and during its first six months, the museum attracted 94,000 visits. Locomotion was shortlisted as one of the final five contenders in the Gulbenkian Prize, which is the largest arts prize in the United Kingdom. 6b81b59d98 == Gameplay == 6b81b59d98 Locomotion was released to mixed reviews, with critics feeling the game's presentation was dated for its time and was less user-friendly than its predecessors. Following an extended hiatus from the video game industry, the game's engine was used as the basis for a 2013 mobile iteration of Transport Tycoon for Android and iOS. Locomotion has also since received an unofficial, open source reimplementation, known as OpenLoco. 6b81b59d98

Locomotion Locomotion may refer to: Motion (physics) Robot locomotion, of man-made devices Aquatic locomotion Flight Locomotion in space Terrestrial locomotion Animal Locomotion means the act or ability of something to transport or move itself from place to place 6b81b59d98

Terrestrial locomotion Terrestrial locomotion is the method of movement of an organism on land. Organisms employ many different methods of movement for a variety of reasons. Terrestrial locomotion is the method of movement of an organism on land. Organisms employ many different methods of movement for a variety of reasons 6b81b59d98

Carangiform, in which the wave is concentrated near the tail, which oscillates rapidly; 6b81b59d98 limbless locomotion – moving without legs, primarily using the body itself as a propulsive structure. 6b81b59d98 == Biomechanics == 6b81b59d98 Robot locomotion, of man-made devices 6b81b59d98

Animal Locomotion Animal Locomotion: An Electro-photographic Investigation of Consecutive Phases of Animal Movements is a series of scientific photographs by Eadweard Muybridge Animal Locomotion: An Electro-photographic Investigation of Consecutive Phases of Animal Movements is a series of scientific

photographs by Eadweard Muybridge made in 1884 and 1885 at the University of Pennsylvania, to study motion in animals (including humans). Published on July 9, 1887, the chronophotographic series comprised 781 collotype plates, each containing up to 36 pictures of the different phases of a specific motion of one subject (over 20,000 images in total) 6b81b59d98

Locomotion Museum Locomotion, previously known as Locomotion the National Railway Museum at Shildon, is a railway museum in Shildon, County Durham, England. The museum was Locomotion, previously known as Locomotion the National Railway Museum at Shildon, is a railway museum in Shildon, County Durham, England. The museum was renamed in 2017 when it became part of the Science Museum Group 6b81b59d98

In September 1825, Locomotion hauled the first train on the Stockton and Darlington Railway, the first locomotive to haul a passenger train on a public railway. On 1 July 1828, it was heavily damaged when its boiler exploded at Aycliffe Lane station, killing its driver, John Cree. It was rebuilt, but as a consequence of the rapid advances... 6b81b59d98

Locomotion No. 1 Locomotion No. It became the first steam locomotive to haul a passenger-carrying train on a public railway, the Stockton and Darlington Railway (S&DR). 1 (originally named Active) is an early steam locomotive that was built in 1825 by the pioneering railway engineers George and Robert Stephenson Locomotion No. 1 (originally named Active) is an early steam locomotive that was built in 1825 by the pioneering railway engineers George and Robert Stephenson at their manufacturing firm, Robert Stephenson and Company 6b81b59d98

In limbless locomotion, forward locomotion is generated by propagating flexural waves along the length of the animal's body. Forces generated between the animal and surrounding environment lead to a generation of alternating sideways forces that act to move the animal forward. These forces generate thrust and drag. 6b81b59d98 Terrestrial locomotion is of great interest to the study of evolution, which determines that aquatic organisms adapted to terrestrial environments. Animal locomotion on land experiences buoyancy and friction to a lesser extent, and gravity to a greater extent. 6b81b59d98 legged – moving by using appendages 6b81b59d98

Animal locomotion , running, swimming, jumping, flying, hopping, soaring and gliding. g. Many animal species depend on their environment for transportation, a type of mobility called passive locomotion, e. , sailing (some jellyfish), kiting (spiders), rolling (some beetles and spiders) or riding other animals (phoresis). Some modes of locomotion are (initially) In ethology, animal locomotion is any of a variety of methods that animals use to move from one place to another. ethology, animal locomotion is any of a variety of methods that animals use to move from one place to another. Some modes of locomotion are (initially) self-propelled, e. g 6b81b59d98

On 24 May 2024, a second building, called 'New Hall', was unveiled to house national collection vehicles built in the old Shildon Works and the surrounding area. In addition, parts of the original museum including the coal drops have been restored, having fallen out of use 6b81b59d98

Fish locomotion This is achieved in different groups of fish by a variety Fish locomotion is the various types of animal locomotion used by fish, principally by swimming. Fish locomotion is the various types of animal locomotion used by fish, principally by swimming. The major forms of locomotion in fish are:. This is achieved in different groups of fish by a variety of mechanisms of propulsion, most often by wave-like lateral flexions of the fish's body and tail in the water, and in various specialised fish by motions of the fins 6b81b59d98

Chris Sawyer's Locomotion The game is a simulation game in which the player takes on the role of a transportation company manager, building transportation networks and managing the flow of goods and passengers in order to compete against rival companies. Sawyer independently developed the game over nine years from the 1990s as a "spiritual successor to Transport Tycoon", with the game featuring "fundamentally the same" gameplay but with "differences in detail, scale and presentation" to update and refine the features that Sawyer "wanted to get right" in its predecessor. Chris Sawyer's Locomotion (often simply Locomotion) is a video game designed and programmed by independent game developer Chris Sawyer, and published Chris Sawyer's Locomotion (often simply Locomotion) is a video game designed and programmed by independent game developer Chris Sawyer, and published by Atari Interactive in September 2004 6b81b59d98

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Undulatory locomotion Examples of this type of gait include crawling in snakes, or swimming in the lamprey. In robotics this movement strategy is studied in order to create novel robotic devices capable of traversing a variety of environments. Although this is typically the type of gait utilized by limbless animals, some creatures with limbs, such as the salamander, forgo use of their legs in certain environments and exhibit undulatory locomotion. Undulatory locomotion is the type of motion characterized by wave-like movement patterns that act to propel an animal forward. Examples of this type of Undulatory locomotion is the type of motion characterized by wave-like movement patterns that act to propel an animal forward 6b81b59d98

Locomotion may refer to: 6b81b59d98 rolling – rotating the body over a substrate 6b81b59d98 Some animals are exclusively arboreal in habitat, such as tree snails. 6b81b59d98 More specialized fish include movement by pectoral fins with a mainly stiff body, opposed sculling with dorsal and anal fins, as in the sunfish; and movement by propagating a wave along the long fins with a motionless body, as in the knifefish or featherbacks. 6b81b59d98 Following motion studies in California and his lectures with the zoopraxiscope, Muybridge was commissioned by the University of Pennsylvania to oversee the photographic aspects of a scientific study of animal movement. The body of work is celebrated for its contribution to both the art of photography and to science. 6b81b59d98

Arboreal locomotion Furthermore, many of these same principles may be applied to climbing without trees, such as on rock piles or mountains. In habitats in which trees are present, animals have evolved to move in them. Some animals may Arboreal locomotion is the locomotion of animals in trees. Some animals may scale trees only occasionally (scansorial), but others are exclusively arboreal. The habitats pose numerous mechanical challenges to animals moving through them and lead to a variety of anatomical, behavioral and ecological consequences as well as variations throughout different species. In habitats in

which trees are present, animals have evolved to move in them. Arboreal locomotion is the locomotion of animals in trees 6b81b59d98

In September 2025, the museum was the starting point for the Anniversary Journey of Locomotion No.1, which was a three day journey... 6b81b59d98 == Overview == 6b81b59d98 Ostraciiform, with almost no oscillation except of the tail fin. 6b81b59d98 Some terrains and terrestrial surfaces permit or demand alternative locomotive styles. A sliding component to locomotion becomes possible on slippery surfaces (such as ice and snow), where locomotion is aided by potential energy, or on loose surfaces (such as sand or scree), where friction is low but purchase (traction) is difficult. Humans, especially, have adapted to sliding over terrestrial snowpack and terrestrial ice by means of ice skates, snow skis, and toboggans. 6b81b59d98 Evolutionary taxonomy establishes three basic forms of terrestrial locomotion: 6b81b59d98 In addition, some fish can variously "walk" (i.e., crawl over land using the pectoral and pelvic fins), burrow in mud, leap out of the water and even glide temporarily through the air. 6b81b59d98 Sub-carangiform, in which the wave increases quickly in amplitude towards the tail; 6b81b59d98 Aquatic animals adapted to polar climates, such as... 6b81b59d98 In 1878, Muybridge published his first series of chronophotographic pictures as 6 cabinet cards entitled The Horse in Motion, from the recordings made as an assignment from industrialist and horse breeder Leland Stanford. The revolutionary images gained worldwide attention and inspired Muybridge to change his career from "photographic view artist" to scientific photographer and lecturer. 6b81b59d98 == Motion == 6b81b59d98 Thunniform, rapid swimming with a large powerful crescent-shaped tail; and 6b81b59d98 Locomotion was ordered by the Stockton and Darlington Railway Company in September 1824; its design benefitted from George Stephenson's experience building his series of Killingworth locomotives. It is believed that Locomotion No. 1 was the first locomotive to make use of coupling rods to link together its driving wheels, reducing the chance of the wheels slipping on the iron rails. However, the centre-flue boiler proved to be a weakness, providing a poorer heating surface than later multi-flue boilers. 6b81b59d98 The anatomical structures that animals use for movement, including cilia, legs, wings, arms, fins, or tails... 6b81b59d98