

Strange Rains

When animals get swept up in clouds, look out below!

For the complete photos with media resources, visit:

<http://nationalgeographic.org/media/strange-rains-wbt/>

It's raining cats and dogs? More like bats and [polliwogs](#).

“Animal rain” is a real [weather](#) phenomenon that happens when small animals get swept up in [waterspouts](#) or [updrafts](#), and then fall to Earth with raindrops. Reported rains of bats, fish, snakes, birds, frogs, and jellies stretch back for centuries.

The [phenomena](#) most associated with animal rain are waterspouts, although many [meteorologists](#) are skeptical that waterspouts can actually cause animal rain. Waterspouts form as violent [storm](#) clouds swirl above a large body of water. These clouds form a [tornado](#)-like whirlwind (called a [vortex](#)) that dips into the ocean, lake, or pond. Waterspouts can spin up to 160 kilometers per hour (100 miles per hour), and may pull up small objects in their funnel—water, pebbles, and small aquatic animals. It is important to remember that a waterspout is not a swirling column of water—the water in a waterspout is the result of condensation, not liquid "sucked up" from a body of water.

Strong winds (called updrafts) may also pull animals into their swirling vortices. Updrafts can sweep up much larger animals than waterspouts—traveling birds and bats, as well as frogs, snakes, and insects.

As waterspouts and updrafts move over land, they lose their swirling [energy](#). The storm clouds that formed the waterspouts are forced to dump their heavy loads. The heaviest objects are dumped first, and the lightest objects (usually simple

raindrops) are dumped last. This explains why reports of animal rain usually describe only one type of animal raining down. A cloud will dump all objects of a similar weight at the same time—fish (heavy), followed by insects (lighter), followed by rain (lightest), for example.

Precipitation—even animal rain—is part of the natural movement of water in our atmosphere. Clouds always move from high-pressure systems to low-pressure systems. High-pressure areas are often near the surface of the Earth (although entire regions, such as the poles, are high-pressure zones). Low-pressure areas are often high in the atmosphere (although the region around the Equator is a low-pressure zone). Storms, precipitation, and even animal rain “lighten” the cloud’s load and allow it to continue its movement in the atmosphere.

Fast Facts

Here are a few examples of animal rain reported around the world. Keep in mind—not all of these are proven!

- “rain of tadpoles” in Ishikawa, Japan (2009)
- “rain of fish” in Kerala, India (2008)
- “rain of worms” in Jennings, Louisiana (2007)
- “rain of bats” in southwestern Texas (2006)
- “rain of frogs” in Odzaci, Serbia (2005)
- “rain of jellies” in Tasmania, Australia (1996)

Vocabulary

Term	Part of Speech	Definition
atmosphere	<i>noun</i>	layers of gases surrounding a planet or other celestial body.
cloud	<i>noun</i>	visible mass of tiny water droplets or ice crystals in Earth's atmosphere.
condensation	<i>noun</i>	process by which water vapor becomes liquid.
ecosystem	<i>noun</i>	community and interactions of living and nonliving things in an area.
energy	<i>noun</i>	capacity to do work.

Term	Part of Speech	Definition
funnel cloud	<i>noun</i>	tube-shaped cloud that, if it touches Earth, becomes a tornado or waterspout.
high-pressure system	<i>noun</i>	weather pattern characterized by high air pressure, usually as a result of cooling. High-pressure systems are usually associated with clear weather.
low-pressure system	<i>noun</i>	weather pattern characterized by low air pressure, usually as a result of warming. Low-pressure systems are often associated with storms.
meteorologist	<i>noun</i>	person who studies patterns and changes in Earth's atmosphere.
phenomena	<i>plural noun</i>	(singular: phenomenon) any observable occurrence or feature.
polliwog	<i>noun</i>	frog or toad in its early state of development. Also called a tadpole.
precipitation	<i>noun</i>	all forms in which water falls to Earth from the atmosphere.
storm	<i>noun</i>	severe weather indicating a disturbed state of the atmosphere resulting from uplifted air.
tornado	<i>noun</i>	a violently rotating column of air that forms at the bottom of a cloud and touches the ground.
updraft	<i>noun</i>	rising movement of gas.
vortex	<i>noun</i>	column of rotating fluid, such as air (wind) or water.
waterspout	<i>noun</i>	column of rotating cloud-filled wind that descends to an ocean or lake.
weather	<i>noun</i>	state of the atmosphere, including temperature, atmospheric pressure, wind, humidity, precipitation, and cloudiness.

Articles & Profiles

- [Library of Congress: Everyday Mysteries—Can it rain frogs, fish, and other objects?](#)
- [BBC: How Can It Rain Fish?](#)

Images

- [NOAA: Bat-Eating Supercell](#)

Video

- National Geographic Channel: Stranger Than Nature—Sky Fish
- BBC: Supernatural—Raining Fish



© 1996–2016 National Geographic Society. All rights reserved.