An oxbow lake starts out as a curve, or meander, in a river. A lake forms as the river finds a different, shorter, course. The meander becomes an oxbow lake along the side of the river.

Oxbow lakes usually form in flat, low-lying plains close to where the river empties into another body of water. On these plains, rivers often have wide meanders.

Meanders that form oxbow lakes have two sets of curves: one curving away from the straight path of the river and one curving back. The corners of the curves closest to each other are called concave banks. The concave banks erode over time. The force of the rivers flowing water wears away the land on the meanders concave banks.

The banks opposite the concave banks are called convex banks. The opposite of erosion happens here. Silt and sediment build up on convex banks. This build-up is called deposition.

Erosion and deposition eventually cause a new channel to be cut through the small piece of land at the narrow end of the meander. The river makes a shortcut. Oxbow lakes are the remains of the bend in the river.

Oxbow lakes are stillwater lakes. This means that water does not flow into or out of them. There is no stream or spring feeding the lake, and it doesn't have a
natural outlet. Oxbow lakes often become swamps or bogs, and they often dry up as their water evaporates.

Oxbow lakes can be rich wildlife habitats. Along the Amazon River in South America, oxbow lakes are common and their still waters provide a unique habitat for plants and wildlife. Giant river otters frequently live in the Amazons oxbow lakes, and feed on about 5 kilograms (11 pounds) of fish per day.

People often create oxbow lakes. The Mississippi River is shorter now than it was in the 19th century, for instance, because engineers have cut off hundreds of meanders. This created hundreds of oxbow lakes. These lakes eventually dried up to create acres of land for farming, housing, and industry.

An oxbow lake gets its name from the U-shaped collar placed around an ox's neck to which a plow is attached. It can also be called a horseshoe lake, a loop lake, or a cutoff lake.

Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>billabong</td>
<td>noun</td>
<td>Australian name for an oxbow lake.</td>
</tr>
<tr>
<td>bog</td>
<td>noun</td>
<td>wetland of soft ground made mostly of decaying plant matter.</td>
</tr>
<tr>
<td>channel</td>
<td>noun</td>
<td>waterway between two relatively close land masses.</td>
</tr>
<tr>
<td>concave bank</td>
<td>noun</td>
<td>the outside bank of a rounded bend in a river.</td>
</tr>
<tr>
<td>convex bank</td>
<td>noun</td>
<td>inside bank of a rounded bend in a river.</td>
</tr>
<tr>
<td>deposition</td>
<td>noun</td>
<td>process of silt and sediment building up in an area.</td>
</tr>
<tr>
<td>engineer</td>
<td>noun</td>
<td>person who plans the building of things, such as structures (construction engineer) or substances (chemical engineer).</td>
</tr>
<tr>
<td>erode</td>
<td>verb</td>
<td>to wear away.</td>
</tr>
<tr>
<td>Term</td>
<td>Part of Speech</td>
<td>Definition</td>
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<td>--------------</td>
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<tr>
<td>evaporate</td>
<td>verb</td>
<td>to change from a liquid to a gas or vapor.</td>
</tr>
<tr>
<td>farming</td>
<td>noun</td>
<td>the art, science, and business of cultivating the land for growing crops.</td>
</tr>
<tr>
<td>fish</td>
<td>noun</td>
<td>aquatic animals with gills, and usually fins and scales.</td>
</tr>
<tr>
<td>giant river</td>
<td>noun</td>
<td>aquatic otter up to six feet long, native to the Amazon, Orinoco, and La Plata rivers of South America.</td>
</tr>
<tr>
<td>otter</td>
<td>noun</td>
<td></td>
</tr>
<tr>
<td>habitat</td>
<td>noun</td>
<td>environment where an organism lives throughout the year or for shorter periods of time.</td>
</tr>
<tr>
<td>housing</td>
<td>noun</td>
<td>shelters where people live.</td>
</tr>
<tr>
<td>industry</td>
<td>noun</td>
<td>activity that produces goods and services.</td>
</tr>
<tr>
<td>lake</td>
<td>noun</td>
<td>body of water surrounded by land.</td>
</tr>
<tr>
<td>meander</td>
<td>noun</td>
<td>large curve in a lake or stream.</td>
</tr>
<tr>
<td>ox</td>
<td>noun</td>
<td>large bovine often used for hauling heavy loads.</td>
</tr>
<tr>
<td>oxbow lake</td>
<td>noun</td>
<td>lake formed from an abandoned bend in a river.</td>
</tr>
<tr>
<td>plain</td>
<td>noun</td>
<td>flat, smooth area at a low elevation.</td>
</tr>
<tr>
<td>plow</td>
<td>noun, verb</td>
<td>tool used for cutting, lifting, and turning the soil in preparation for planting.</td>
</tr>
<tr>
<td>river</td>
<td>noun</td>
<td>large stream of flowing fresh water.</td>
</tr>
<tr>
<td>sediment</td>
<td>noun</td>
<td>solid material transported and deposited by water, ice, and wind.</td>
</tr>
<tr>
<td>silt</td>
<td>noun</td>
<td>small sediment particles.</td>
</tr>
<tr>
<td>spring</td>
<td>noun</td>
<td>small flow of water flowing naturally from an underground water source.</td>
</tr>
<tr>
<td>still-water</td>
<td>noun</td>
<td>body of water with no streams or springs flowing into or out of it.</td>
</tr>
<tr>
<td>lake</td>
<td>noun</td>
<td>body of flowing water.</td>
</tr>
<tr>
<td>swamp</td>
<td>noun</td>
<td>land permanently saturated with water and sometimes covered with it.</td>
</tr>
</tbody>
</table>

Maps
Ohio Department of Natural Resources: Oxbow Lake Wildlife Area

Websites

- Missouri Botanical Gardens: What is an Oxbow Lake?