

Video summary	Before watching the video	During the video
<p>Rewilding aims to restore ecosystems by removing human control and letting nature back in to manage it. It is claimed that giving areas of land back to nature can help restore degraded landscapes and habitats, including waterways. The charity, Rewilding Britain, defines rewilding as: <i>“the large-scale restoration of ecosystems to the point where nature is allowed to take care of itself. Rewilding seeks to reinstate natural processes and, where appropriate, missing species – allowing them to shape the landscape and the habitats within.”</i></p> <p>Beavers are natural river engineers and can alter the landscape in ways that are beneficial and attractive to variety of wildlife, thus increasing biodiversity.</p> <p>Beavers can slow the rate of river-flow through their dam-building and this can lessen the likelihood of flooding downstream.</p> <p>Beavers’ natural river engineering can also act as an effective water filter.</p> <p>The beaver-built dams on this stretch of the River Tamar, in Devon, are claimed to collect up to 80% of the silt in the river as it flows through, including the pollutants in it such as phosphates and nitrates from agricultural run-off and waste water systems releasing sewage upstream.</p> <p>Beavers were once native to the UK as recently as 300-400 years ago, but they were hunted to extinction for their fur and their meat.</p>	<ul style="list-style-type: none"> <li>• Using digital mapping software such as Digimaps, Arc GIS, or Google Maps, locate the source and mouth of the River Tamar on a map and identify some of the landscapes it passes through.</li> <li>• To locate and use images of outstanding, natural beauty you could research, ‘Geography for Schools’ as the photographs will show a river flowing through settlements and agricultural land. Thus, implying that it is likely to be contaminated like many other rivers in the UK.</li> <li>• Recap learning by asking students to make connections between river velocity, sediment transportation and pollutants and flooding downstream after peak flow.</li> <li>• Establish with students what they know about beavers and tell them that it was a creature once native to this country before it became extinct.</li> </ul>	<p>You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include:</p> <ul style="list-style-type: none"> <li>• What kind of problems does the River Tamar face and why? (Agricultural run-off and sewage pollutants)</li> <li>• How might beavers contribute to cleaner rivers and a healthier environment? (Engineering landscapes to be more diverse, attracting a variety of wildlife; reducing flooding, and filtering pollutants).</li> </ul>

<p>People have only recently realised the important role they can play in thriving and healthy ecosystems.</p>		
<p><b>After watching</b></p>		
<ul style="list-style-type: none"> <li>• Discuss students' initial thoughts on the idea of rewilding beavers and whether it is useful or not in their opinion. Make a class list of pros and cons.</li> <li>• Follow this up with a more sustained enquiry-led study of the impact beavers can have on landscapes, using a range of sources.</li> <li>• Ask students to consider how this may come into conflict with the need to grow and produce food through farming activities and to create a case study and report with recommendations.</li> </ul>		
<p><b>Curriculum notes</b></p>	<p><b>Where next?</b></p>	<p><b>Links</b></p>
<p>All these short clips build on students' understanding of human and environmental interactions and provide opportunities to practice geographical skills such as enquiry, mapping and fieldwork. At KS3, students can learn more about how human and physical processes interact to influence and change landscapes, environments and the climate. At KS4, the film supports understanding about fluvial environments, flooding hazards and climate change, environmental management and fieldwork investigation. This clip could be used to support the delivery of geography to KS3 and KS4 students. The film might also be used for example, to contribute to case studies about human interactions on fluvial environments (CCEA), the topic of managing rivers, resources and or landscapes appears in OCR, Edexcel, AQA, WJEC KS4/GCSE in England and Wales, CCEA GCSE in Northern Ireland and SQA National 4/5 in Scotland.</p>	<p>Use the information contained on <a href="#">this page</a> to look at how erosion, transportation and deposition all occur in a river.</p>	<p><b>BBC:</b>  <a href="#">BBC Teach - Rewilding at Kielder Forest</a>  <a href="#">BBC Bitesize - River processes AQA</a>  <a href="#">BBC Bitesize - River processes and landscapes WJEC</a>  <a href="#">BBC News - Beaver families win legal 'right to remain'</a>  <a href="#">GCSE Geography - exam practice</a>  <a href="#">Bitesize Careers: Jobs that use Geography</a></p> <p><b>Other:</b>  <a href="#">River Otter Beaver Trial Devon- University of Exeter</a></p>