

LISTENING – HOW WOLVES CHANGE RIVERS

INSTRUCTIONS:

- 1.- Watch the videoclip.
- 2.- Complete the transcript. You can listen to the videoclip once or twice, until you have filled all the easiest gaps, then pause the video to listen several times to the most difficult words.

One of the most exciting scientific _____ of the past half century has been the discovery of widespread trophic cascades.

A trophic cascade is an ecological process which starts at the top of the food _____ and tumbles all the way down to the bottom. And the classic example is what happened in the Yellowstone National Park in the United States when wolves were reintroduced in _____. Now, we all know that wolves _____ various species of animals, but perhaps we're slightly less aware that they give _____ to many others.

Before the wolves turned up they'd been absent for _____ years. The- the numbers of deer, because there was nothing to hunt them had built up and built up in the Yellowstone Park, and despite efforts by humans to control them, they'd managed to reduce much of the vegetation there to almost _____, they'd just grazed it away.

But as soon as the wolves arrived, even though they were _____ in number, they started to have the most remarkable effects. First, of course, they killed some of the deer, but that wasn't a major thing. Much more significantly, they radically _____ the behaviour of the deer. The deer started avoiding certain parts of the park, the places where they could be trapped most easily, particularly the _____ and the gorges. And immediately those places started to regenerate. In some areas, the _____ of the trees quintupled in just six years. Bare valley sides quickly became forests of aspen, and willow, and cottonwood. And as soon as that happened, the birds started moving in. The number of song birds and migratory birds started to increase greatly.

The number of beavers started to increase, because beavers like to- to eat the trees. And beavers are like wolves, they're ecosystem _____, they create niches for other species. And the dams they built in the rivers uhm- provided habitats for otters, and musk rats, and ducks, and fish, and reptiles, and amphibians.

The wolves killed coyotes, and, as a result of that, the number of rabbits and mice began to _____, which meant more hawks, more weasels, more foxes, more badgers. Ravens and bald eagles came down to feed on the carrion that the wolves had left. Bears fed on it, too, and their population began to rise, as well, partly also because there were more berries growing on the _____ shrubs. And the bears reinforced the impact of the wolves by killing some of the calves of the deer.

But here's where it gets really interesting. The wolves changed the _____ of the rivers. They began to meander less, there is less erosion, their channels narrowed, more pools formed, more riffle sections, all of which were great for wildlife habitats. The rivers changed in response to the wolves. And the reason was the regenerating forests stabilised the banks so that they collapsed less often, so that the rivers became more fixed in their course.

Similarly, by driving the deer out of some _____, and the vegetation recovering on the valley sides there is less soil erosion because the vegetation stabilised that as well.

So, the wolves, small in number, transformed not just the ecosystem of the Yellowstone National Park, this huge area of land, but also its physical _____.

3.- Drag these words from the videoclip next to the correct phonemes:

been	kill							/eɪ/
most	thing							/aɪ/
way	more							/iː/
down	place							/ɪ/
food	gorge							/aʊ/
now	those							/əʊ/
know	tree							/uː/
give	six							/ɔː/
build	side							
graze	fish							
soon	mice							
though	hawk							
they	bald							
course	feed							