# Extinct and Endangered Animals

14 Oct 10:30 Duty six : Blue

Start	Time	Activity	Requirements	Instructions	Scouter
Some animals are extinct. Others are endangered. Why does this happen?					
14 Oct 10:30	5	Activities : Opening	Register, beans, flag, totem and skin	Grand Howl Flag Break Register Inspection - belts and shoes	Akela
		What makes so	me plants and animals survive? Why are there very few blue fr	uits in the world?	
14 Oct 10:35	10	Game : Natural Selection		Mark off a 1 square meter (or yard) section of grass. Scatter a selection of colored toothpicks in the marked off area – you will want to count the number of toothpicks of each color before you scatter them. Provide a group of students with ~15 seconds to pick up as many toothpicks as they can find. Count and record the number of each color that was collected. Repeat this exercise several more times.	Akela
				After returning inside, Cubs can see which colors were found easier. You should find that the green toothpicks were found in smaller numbers, especially in the first rounds.	
		The earth is the perfect home for life. But if	something goes wrong in our biosphere (warmer or colder) so	ome plants and animals on earth may die out.	
14 Oct 10:45	30	Activities : Make a Biosphere	Glass jars with lids Activated charcoal Gravel/riversand or small stones	Step 1 - Thoroughly clean a airtight glass container (such as a mason jar).	Akela
			Potting soil Plants or moss	The jar needs to be very clean to avoid any mold growth.	
			Decorations (bark, stones, etc)	Step 2 - Add a layer of about 2 - 5 cm (1 - 2 inches) of clean sand or clean gravel to the bottom of the jar.	
				Aquarium sand works very well. This will create a drainage layer and water basin for the excess water in your biosphere.	
				Step 3 - Add a thin layer of about	

# 1 - 2 cm (0.5 inches) of activated charcoal on top of the sand.

You can get activated charcoal from any pet supply store. This layer will act as a filter to keep your biosphere nice and clean.

Step 4 - Add a layer of about 5 -10 cm (2 - 4 inches) of good draining soil.

Step 5 - Add some decorative items like a rock or piece of wood.

.Step 6 - Add some plants and moss.

I recommend that you add very small slow growing plants that can tolerate warm, humid, environments. Sheet moss is also a nice decorate touch.

# Step 7 - Water your biosphere.

Give your biosphere enough water so that the sand layer is fairly saturated. You actually won't need very much water to achieve this so be careful when adding the water.

# Step 8 - Cap your biosphere.

Once you have watered your biosphere, it is ready to self-regulate.

# Step 9 - Place your biosphere near a window but make sure it is not in direct sunlight.

If you place your biosphere in direct sunlight the inside will get too hot and you will end up cooking your plants. You may also notice a lot of condensation building up inside your biosphere at first and this means that

				you may have watered it too much. Just open the lid for a day and let some of the water evaporate.	
			Even a small change to an ecosystem can have big consequer	nces	
14 Oct 11:15	10	Yarn : How Wolves Change Rivers		See attached	Akela
			You've watered your plants, now lets water and feed you		
14 Oct 11:25	5	Activities : Juice and biscuits		Juice and biscuit break	Mang
		Animals could be	very different. Should we evolve some of our own and see ho	w weird it could get?	
14 Oct 11:30	15	Game : Weird Animals		<ol> <li>Each Cub starts with a piece of paper and a drawing tool and sits so that his or her drawing is somewhat hidden from the Cub in the next seat. The element of surprise at the end is half the fun!</li> <li>Each Cub draws a head and neck. It can be made up or a real animal. Fold the top of the paper down to conceal the drawing, letting only the bottom of the neck show. Hand the drawing to the Cub to the left.</li> <li>Sa2. Each person draws a head and</li> <li>the top of the paper down to convodrawing, letting only the bottom of the neck show. Hand the drawing to the person to your left.3. Everyone draws the torso and legs using the neck lines as the beginning point. Again, fold the paper down to conceal the drawing, letting just the bottom of the drawing show. Hand the drawing to the Cub on your left.</li> <li>Everyone draws the body and legs using the neck lines as the beginning point. Again, fold the paper down to conceal your drawing, letting just the bottom of the waist line show. Hand the drawing to the person at your left.</li> <li>Oraw the legs and tail (if your animal has a tail).</li> <li>(Optional) Add a name to the unopened drawing and pass again.</li> <li>Finally, each Cub unfolds the piece of paper they are holding to reveal the Weird Animal that has been created. Take turns</li> </ol>	Akela
				snaring the finished drawings.	
	1	We le	l earned about extinct animals from cave drawings and fossils o	or bones.	
14 Oct 11:45	30	Crafts : Cave Drawings	Brown paper, beige sugar paper	Put up some crumpled brown paper on the wall of the Hall.	Akela
			Unarcoal/pastels/crayons Brown/black paint	Show Cubs examples of rock art of different animals. See how many extinct animals they could recognise	
			Air gun (if available) or old toothbrush	Cubs to draw pictures of their chosen extinct or endangered animal on the brown paper. They can also do individual drawings on beige sugar paper.	

				Use the paint to lightly spray over the pictures. Cubs can place their hands over the paper to create a void in the shape of their hands.	
Dinosaurs have left some footprints behind. See if you can find any using your field guide					
14 Oct 12:15	10	Game : Dinosaur Tracks		Print out copies of the track templates for each team Print out one set larger (or use the templates to create large footprints) Hide the footprints around the area Cubs to work in teams to find the footprints and mark on the field guide where they find the particular footprint	Akela
14 Oct 12:25	5	Activities : Closing	Totem, Skin Badges, certificates	Announcements Badge handouts Grand Howl Flag Down Prayer Dismiss	Akela

Programme prepared on 09 May 00:00

#### How Wolves Change Rivers

Category	Yam
Time to allocate (mins)	10
	In 1926, there were no longer wolves in Yellowstone, once the natural habitat of this species. Between 1977 and the re-introduction in 1995, we have reliable reports of wolves being seen throughout the park. Most of them were either lone wolves or pairs, probably only transiting. Finally, in 1995, grey wolf packs were reintroduced in the Lamar Valley of Yellowstone National Park and Idaho.
	Before the extirpation, the wolves living within the park belonged to the subspecies Northern Rocky Mountains wolf. The reintroduced species of 1995 belong to the subspecies Mackenzie Valley wolf.
	The reintroduction of the wolves has shown a greater impact on the biodiversity of the Yellowstone than anticipated.
	The wolves' predation on the elk population, until then unchallenged, produced a significant increase of new-growth in various plants. Aspen and willow trees, previously grazed by the elks more or less at will, got suddenly a chance to grow. With the presence of the wolves, the elks stopped venturing into deeper and for them dangerous thickets where they could easily be surprised. They began to avoid areas of low visibility, which would increase the chances of wolf attacks.
Story	The elks began avoiding open regions such as valley bottoms, open meadows and gorges, where they would be at a disadvantage in case of an attack from a wolf pack. William J. Ripple and Robert L. Bestcha dubbed this process <i>top-down control</i> . In ecology, top-down control denotes that top predators regulate the lower sections of the trophic pyramid. In other words: a top predator controls the structure or population dynamics of a particular ecosystem.
	With new vegetation growing and expanding came subtle changes in the waterways running through the park. That had an impact on other species as well. Various bird species came back to Yellowstone with the increased number of trees. The beaver, previously extinct in the region, returned to the park. Their dams across the rivers attracted otters, muskrats, and reptiles.
	Probably due to the wolves keeping the coyote populations at bay, the red fox got suddenly a chance to survive because the number of rabbits and mice grew considerably. The raven, always the wolf follower, came back to the park as well, now able to feed on the leftovers of the wolves.
	The wolves changed the rivers, in as much as they readdressed the lost balance within the region, one we had created when we exterminated them. With a better balance between predator and prey, top meat eaters and top grazers, came the possibility for other species to thrive. With the increased vegetation growth, erosion decreased and the river banks stabilized.
	Every time we produce drastic changes in nature, we interfere deeply with the whole eco-system.
	Nature is indeed a beautiful act of balance.
Entry written by Sharon Venn of 1st Randburg	

### Documents

Video Clip How Wolves Change Rivers.mp4

#### Dinosaur Tracks

Category	Game		
Туре	Wide game		
Time to allocate (mins)	10		
Instructions	Print out copies of the track templates for each team		
	Print out one set larger (or use the templates to create large footprints)		
	Hide the footprints around the area		
	Cubs to work in teams to find the footprints and mark on the field guide where they find the particular footprint		
Entry written by Sharon Venn of 1st Randburg			

#### Documents

Dinosaur tracks dinosaur tracks.docx