Quality in interpretation

Europarc conference, 2011
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A chaque fonction son organe

La tête, pourvue d’un bec puissant et tranchant qui lui sert à dépecer les charognes...

Les yeux : ils peuvent repérer une proie de 30 cm à 3 000 m d’altitude.

Les serres sont adaptées à la marche plutôt qu’à la saisie des proies.

L’odorat, par contre, ne paraît pas jouer un rôle important.

Le vol du vautour

1. Montée en spirale, le vautour plane porté par le courant d’air.
2. Descente en oblique.
3. Descente en piqué.
4. Descente avec effet parachute.
5. Atterrissage, freinage au moyen des ailes et de la queue.

L’agenda du vautour fauve

[Diagramme illustrant les étapes du vol et de la vie d’un vautour]
Double-Decker Delight

Two-Faced
Look closely at Sloch, the remarkable mountain (980m/3215ft) opposite. You can see it consists of two parts. The lower section is made of gneiss (sounds like ‘nice’), the silvery-grey rock that once formed gentle hills and glens hereabouts. Above it lies a rusty-brown sandstone, which great rivers created when they swept across this area and dumped sand over 5km (3miles) deep. All this happened many millions of years ago, when life had barely begun on Earth.

Going to Pieces
Sloch is now less than 1km high, so where did the other 4km of sandstone go?

The answer is that heavy rains, powerful rivers and rock-shattering frosts gradually wore it away. Huge glaciers supplied the finishing touches when they scoured and scraped their way across this landscape. Given time, the constant wear of water and weather will turn these mountains back to sand.

Gneiss Sand Easy
These two rocks began life very differently.

The sandstone was left by vast rivers. Feel the sand under your hand.

By contrast, huge forces deep in the Earth created the gneiss. Touch the folds where rock buckled under pressure and heat.
Good interpretation

• Engages its audience
  - catches their attention
  - relates to their experience
• Offers interesting ideas and concepts that add to what visitors see, hear and touch
The key message

This place is precious, and worth looking after
What are visitors expecting?

Lassen Sie sich ein auf das Abenteuer Wildnis

feel closer
And what do they find?
Atlantic Salmon Lifecycle

Salmon at Sea
Salmon feed in many parts of the North Atlantic Ocean. Those from British rivers which spend a single winter at sea (grailed) may go no further than the Faeroes, but multi-winter salmon commonly go as far as Greenland and the Norwegian Sea. They feed on a diet of crustaceans and fatty fish such as lantern fish, sardine, post larval capelin, and herring. Salmon tend to double in weight each year, averaging about 1.5 kg and some times even reaching over 4 kg. Up to 90% of males usually survive to return to their home rivers. Salmon numbers are strongly affected by ocean conditions, and the availability of prey, of which some species are taken commercially. Thletes at sea include many predators such as sea lions, seals, dolphins and killer whales, as well as commercial fisheries, including those targeted at other species.

Smolt
Each spring the largest salmon become silvery smolts and start to drift downstream at night towards the sea. In the South, this is usually after one year, most Scottish smolts, with a shorter summer growth season, are 2 – 3 years old. They tend to travel in shoals, becoming more vulnerable to predators. Especially at estuaries and 'bottleneck' areas where the sea is often traversed for many miles. Smolts travel near the surface, and head out to sea on their way to the main ocean feeding grounds.

Parr
Once they have grown to a fingerling size, the pretty marked young salmon are known as parr. Most live in fast, shallow riffles, although about half of them remain in the area, feeling for their food. Smolt is the largest of the river feeding grounds. Effects of droughts and flooding increase as the pollutants affect the area's climate and weather, causing situations where salmon are absent or close to extinction. Fishery regulation remains vital, but is complicated by the fact that it is often associated with dividing the catch rather than conserving the stocks. The emphasis is on recreational fishing, which produces most revenue for rural communities and river owners. Since the development of salmon farming, the commercial value of wild fish for human consumption has declined. Conservation at sea relies largely on agreements at an international level. Droughts, which can range from salmon of different river origins interbreed, have been banned by most North Atlantic countries, but commercial fisheries for prey species have remained poorly regulated. The health of future salmon stocks rests on wise management of both saltwater and freshwater environments.

Returning Adults
At the onset of maturity salmon begin their journey home, apparently finding their way across the ocean with the help of celestial cues and the Earth's electromagnetic field. Most return in grilse, with the proportion of big, multi-sea waterfish varying in different parts of their range and over different periods of time. On reaching coastal waters salmon locate their home rivers by smell. In dry weather they remain near the estuaries, sometimes feeding on small fish and other prey. When the rivers rise after rain they enter them immediately. Adult salmon do not feed in the river and the main freshwater fishery, redfish, is relatively inefficient.self-fed salmon, especially spring run, can sometimes be damaged by angling. Smolts are relatively easily caught and may spend up to a year in the river. Live on fast stretches which comprise about 30% of body weight.

Breeding Pair
After a few weeks in fresh or estuarine water salmon lose their silver coats and begin to develop a colourful breeding dress, gaining also acquiring a hooked lower jaw (upper). Spawning usually takes place between October and January in the same stretch of water where the salmon themselves were born. The juvenile fish drops a series of eggs (ovules), laying eggs which are simultaneously fertilised by an adult male, and often by a precocious pair as well. In fresh water, a few of the female salmon are able to spawn with adult salmon. Criticism can do so but they prefer red and tend to take salmon mainly during spawning time. Most females do in fact have enough breeding fish, even in bad years, to fully stock the rivers - the main limitation on salmon numbers in the state of the rivers themselves, virtually all of which have been degraded to some degree by human activity.

Conservation measures today are increasingly aimed at repairing or improving the streams and rivers on which wild salmon production relies, and management is now being broadened to include the diverse interests which affect our rivers. In Scotland, fishery trusts are promoting habitat rehabilitation and local education. Traditional management methods are being modified by scientific findings. Artificial propagation is expensive and has been found to be relatively ineffective, except in special situations where salmon are absent or close to extinction. Fishery regulation remains vital, but is complicated by the fact that it is often associated with dividing the catch rather than conserving the stocks. The emphasis is on recreational fishing, which produces most revenue for rural communities and river owners. Since the development of salmon farming, the commercial value of wild fish for human consumption has declined. Conservation at sea relies largely on agreements at an international level. Droughts, which can range from salmon of different river origins interbreed, have been banned by most North Atlantic countries, but commercial fisheries for prey species have remained poorly regulated. The health of future salmon stocks rests on wise management of both saltwater and freshwater environments.

Salmon and Sea Trout Restoration Programme in Progress

The Applecross River
Salmon and sea trout were once plentiful in west highland rivers, but numbers have fallen dramatically in recent years.

The Applecross Trust is sponsoring a scientific research into the decline of wild salmon stocks in west coast highland rivers. The programme is managed by the Applecross River is professionally managed by the Seafield Agriculture College at Kilmarnock.

Eggs developed from the last wild salmon caught in the area in 1995 have been gradually introduced in a programme to re-establish native genetic broodstock in the river. Each year many thousands of eggs are released into holding ponds from where they migrate to the open sea.

All are tagged and returning fish in future years are recorded and monitored as part of the ongoing research programme. We hope that you will appreciate that it is important not to disturb any fish which do return to the river. Their return is a measure of the programme's success. Please enjoy your walk beside the river but avoid activities likely to cause disturbance to returning fish. In particular we ask that there is no wading, only wading causing activities, no water sports and no fishing. The long term aim is to restore a healthy population of wild salmon and sea trout with the benefit of the river system and the local recreation environment.

Thank you for your co-operation.
Quality for the future
Blawhorn Moss
National Nature Reserve

A wet place of tiny marvels

Bogs start life as wet hollows in the land left behind by the glaciers (1). Plants grow – but it’s so wet, only plants like mosses and reeds can do well.

When the plants die, the waterlogged ground stops them rotting (2). Year after year, they cover each other in layers, and turn into peat.

Layers of peat build up to form a deep blanket: (3). Here at Blawhorn, it can be eight and a half metres thick (20 feet) – enough to bury two double-decker buses. The deepest layer could be 8,500 years old.

Bogs may look as if nothing is happening – but there are some amazing things going on underneath the boardwalk...

Watch out for yellow tattie or some of the tiny moss. These are the plant’s male sexual organs, designed so that when raindrops hit them, sperm gets splashed around onto the female parts. The sperm swim down into a chamber to fertilise the eggs, and a new plant carrying tiny spores sprouts grows from the chamber.

www.nnr-scotland.org.uk
Really good interpretation

• Is well planned
• Engages its audience
• Offers interesting ideas and concepts that add to what visitors see, hear and touch
• Uses creative, lively ways to communicate
• Respects the character and reflects the high value of the place
• Is linked to unique experiences that fit visitors’ expectations
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