



Let's talk about Choughs

About

This presentation was developed as part of the LIVE Project's environmental education programme, to raise awareness about the natural heritage of the Iveragh Peninsula, in Co. Kerry, Ireland.

It can be used at any time, to help learn more about choughs in Ireland. If you are outside of Ireland, you can adapt it to suit your own area. Contact your local Bird Conservation group for more local knowledge

These resources were developed by Knowledge Gatherer, Fiach Byrne, who carried out an extensive research project on choughs on the Iveragh Peninsula.

Chough

Educational Pack

The Chough Educational Pack consists of:

- PowerPoint Presentation about the Red-billed Chough
- PDF of the Presentation
- Accompanying Teachers Notes with activities and discussion ideas
- PDF of several printable worksheets, suitable for different ages

If you have not already downloaded the full Chough Educational Pack, they are freely available from the Resources Section on our website: www.ecomuseumlive.eu/choughs

Curriculum Links

SESE – Science, Geography and History - Natural Environment, Awareness and Care, Caring for my Locality, Living Things

Visual Arts – Drawing, Paint and colour, Looking and Responding

SPHE – Myself and the Wider World, Community, Responsibility

Physical Education – Outdoor and adventure activities

English - Reading, Writing, Oral language

Gaeilge – If using the Gaeilge version of the presentation

Sustainable

Development

Goals





Other Resources

Here is a selection of groups and organisations working tirelessly to support our endangered birds and raise awareness. Why not find out about a local branch near you and ask an expert to come and talk to your class.

- Birdwatch Ireland
- Irish Wildlife Trust
- Tralee Wetland Centre
- National Biodiversity Data Centre

Further Information:

There are a number of great resources online to learn more about choughs:

- <u>Chough BirdWatch Ireland</u>
- Chough Bird Facts | Pyrrhocorax Pyrrhocorax The RSPB
- Pyrrhocorax pyrrhocorax (Red-billed Chough) (iucnredlist.org)

Teachers Feedback

The LIVE Project is committed to creating a series of educational resources, freely available to all teachers and educators. While our focus is on creating resources relating to the Iveragh Peninsula, in Co. Kerry, and the Llŷn Peninsula in Wales, these resources can be used anywhere, at any time.

In order to make our resources as useful as possible to you, as teachers, we would love to hear any constructive feedback you might have, on this educational pack, and on the development of future resources. **Email us at live@ucc.ie**



Teachers Presentation Notes

Slide No:	Title	Text and Notes
Ι	Let's talk the Red- billed chough	Begin presentation
2	What is a Red- billed chough?	What is a Red-billed Chough?
		We have seven types of crow in Ireland. The Red-billed Chough is one of Ireland's rarest species of crow.
	Extra Notes	You can see here each of the different crow species that can be found in Iveragh. Beginning on the left with the Raven, which is our largest crow - they are shown in order of size, with the magpie as our smallest crow.
		The Irish names (from left to right) are: Fiach dubh, Caróg liath, Rúcach, Cág cosdearg, Cág, Scréachóg choille, Snag breac.
3	Amber Status	The Red-billed Chough is on the Amber Conservation List, which means its population or range has declined moderately in recent years.
		Red-billed Chough
		Irish Name: Cág cosdearg
		Scientific Name: Pyrrhocorax pyrrhocorax
	Extra Notes	Choughs are most abundant in the southwest of Ireland – with 62% of the Ireland's choughs occurring in Cork and Kerry.
		The number of choughs we have here in the southwest has been quite stable in recent years, but choughs have declined in other parts of the country – on the north and south coasts.
		The story in the UK is quite similar, with declines occurring in certain areas – but chough populations remaining healthy in other areas.
4	What does a Red- billed Chough look like?	The Red-billed Chough has dark black feathers – like most other crows.
		But what makes it different, and easy to recognise, is its bright red beak and red legs
	Extra Notes	Scientific Name: <i>Pyrrhocorax pyrrhocorax</i> . The Chough's Latin name means 'Fire raven'. The name comes from the imagery evoked by its red beak and legs and likens it to one of its family members – the Raven.

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Irish name: Cág cosdearg. The Irish name for chough literally means 'redlegged jackdaw'. It is interesting again that it was compared to another member of the crow family – the Jackdaw – but with a nod to the bird's distinctive red legs.

Other names in Irish have a similar format. The Irish for fox, for example, takes the word 'dog' and adds in 'red' – to give 'Madra rua'. This is interesting because the fox belongs to the same family as domestic dogs: 'Canidae'.

Discussion

Ask students to think of the Irish names for other animals they know and see if there are any interesting similarities or differences between these names.

5

Aerobatic Fliers

The Red-billed Chough can also be recognised by its 'fingered' (clearly separated) wing tips.

Choughs frequently swoop and soar in updrafts around cliffs, seemingly just for fun.

So skilled are these natural stunt pilots that they will sometimes even perform barrel rolls.

Extra Notes

The chough is not the only member of the crow family that is known for their aerial acrobatics. The raven is capable of inverting 180° to enter into an upside-down free fall. This is common around Iveragh's cliff faces. Even rooks and jackdaws demonstrate impressive flight displays on windy days. So, keep an eye out for these crows' flight patterns around your local town, village, or farmland.

6

What **does** a Chough sound like?

Choughs have a very distinctive voice

'key-aww - key-aww - key-aww'

Have a listen to the chough's call here:

Extra Notes

The chough's call is the most useful way of identifying the birds from a distance. The call is so high-pitched and piercing that it's hard to mistake them with another crow species.

Fun Activity

Discuss the chough's call with the class and ask if any of the students recognise it. Get them to do their best impression of a flock of choughs - or draw an image of what comes to their mind when they hear the chough's call.

If you listen to the audio clip – you might even mistake them for a laser blaster from Star Wars!

7

How big is a Chough?

A Chough can measure up to 40cm in length from beak to tail. That's the length of 1 and a half normal school rulers!

Extra Notes

At 40cm in length, they come in as mid-sized corvids – nearly right in the middle of the 7 species in terms of size.

Choughs Love Company!

Choughs are very social birds.

They are often found in flocks where they will forage and rest together.

Even juvenile choughs stay together in large flocks during autumn and winter.

Extra Notes

Some of the largest flocks in Iveragh can be found in the sand dunes of Rossbeigh (Glenbeigh) or Derrynane (Caherdaniel), and in the pastures east of Beentee (Cahersiveen) or north of Bray Head (Valentia Island). Ballycarberry, the Tetrapod Trackway, the Kerry Cliffs, Ducalla, Kilrelig, and Com an Chiste are other areas that often host choughs during winter.

Fun Activity

Find a map of Iveragh, or look one up online to see if your students can find any of the areas shown as blue points on the map below to see which areas in your locality are hotspots for choughs.



9 Chough Family Life

Like many other species, choughs are monogamous.

This means that choughs find a single partner when they are young - and they stay together for life.

These pairs will also use the same nest site year after year.

Extra Notes

You can see pairs of choughs preparing for the upcoming breeding season in late March and early April in Iveragh. Around this time, choughs are often seen carrying 'nesting material' in their beaks, such as dry grass, twigs, roots, or even sheep's wool which is used to build or repair their nests.

Chough Chicks

Choughs usually have between two and four chicks each year. Their chicks will usually leave the nest sometime in June or July.

Extra Notes

The first eggs are usually laid in mid-April, with the 'clutch-size' (number of eggs laid) normally ranging from 2 to 5. The female 'incubates' the eggs (keeps them warm) by sitting on them in the nest. During this time, she is fed by the male – who forages for food in nearby locations. The eggs hatch around 20 days after laying, and the juveniles are able to fly when they reach 6-7 weeks of age.

They will then stay and forage with their parents for a few more weeks before joining a flock of juveniles in the Autumn. In these flocks a male and female will form long-term 'pair-bonds'. These pairs will eventually leave the flock to establish themselves at a nest site.

Where do Choughs live?

Red-billed Choughs live on three continents – Asia, Africa, and Europe.

In south and central Europe, they live in Greece, Italy, France, Spain and Portugal.

In northwest Europe choughs are very rare – except in coastal regions of Ireland, the UK, & northwest France.

Extra Notes

Choughs are present over large areas of Asia, especially in China and Mongolia. They are also present in Morocco and Algeria in northwest Africa, as well as Ethiopia in east Africa. In these locations choughs primarily nest in inland mountainous regions where traditional forms of low-intensity pastoral agriculture (livestock rearing) remain. This is also true in the Swiss and French Alps where choughs nest in the mountainous cliffs and forage in the slopes and valleys that are grazed by sheep and goats.

Choughs in northwest Europe also have a strong connection to low-intensity livestock grazing. In Ireland and the UK, this form of agriculture is primarily confined to the countries' coastlines – particularly in the west.

Discussion:

Can you find some of the countries where choughs occur on a map of the world? Examples include:

Ireland, the UK, Portugal, Spain, France, Switzerland, Italy, Greece, Turkey. Syria, Iran, Afghanistan, Pakistan, Mongolia, China.

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Morocco, Alge	eria, and	Ethiopia.
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Where do Choughs like to live in Ireland?

Red-billed Choughs live in Ireland year-round.

They are only found in coastal regions of Ireland.

Kerry is a very important place for Choughs.

Extra Notes:

The fact that 62% of the country's choughs (around 1,500 individuals) were found in counties Cork and Kerry in the most recent national chough census demonstrates just how important the southwest of the country is to the Red-billed Chough.

For comparison, there were around 1,250 individual choughs in the UK when they were last surveyed in 2014

Where do Choughs like to nest?

In northwest Europe, choughs like to nest in caves and crevices found along sea cliffs.

In parts of continental Europe, Africa and Asia, they nest in mountainous cliff faces further inland.

They also sometimes nest in ruined buildings, farmhouses, mines and quarries.

Extra Notes:

Choughs in Ireland mostly build their nests in the caves and crevices found along sea cliffs, although some do nest in mines, quarries, and abandoned buildings. There is also a very interesting record of choughs nesting in a tanker that ran aground on Inis Oírr of the Aran Islands.

14 What do Choughs like to eat?

Choughs like to eat the larvae of different insects such as beetles, flies, moths and craneflies. They use their curved bills to dig them out of the soil.

They will also eat adult beetles, ants, and earthworms.

Choughs in Kerry

Choughs like to forage in the coastal areas and farmland of the Iveragh Peninsula in Co. Kerry.

They forage in well grazed fields – with grass of around 5cm in height.

They also love field boundaries; grassy and earth banks, as well as old stone walls covered in grass.

They also look for food in small hills, hillocks, and ant hills.

Extra Notes:

Choughs choose to forage in these habitats because they contain a lot of their favourite food sources. The cattle and sheep dung found in Iveragh's pastures is suitable for invertebrates to lay their eggs in, and for these eggs to develop into larvae. These larvae then act as food for choughs.

Beetles, earwigs, earthworms, ants, woodlice, and larvae are also found in the soil of pastures, field boundaries, and on small hills and hillocks, which is why choughs also like to forage in these habitats.

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What threats do Choughs face?

In the past, choughs were threatened by shooting and hunting. Today, choughs are mostly threatened by changing land use.

Increased use of machinery, pesticides, and fertilizers - and less cattle and sheep grazing means fewer bugs in the soil, and food is difficult to find.

Extra Notes:

Choughs depend on livestock grazing so that they can find food. If cattle and sheep no longer grazed Iveragh's landscape, the short grasslands that choughs forage in would grow too long and would turn to scrub. These longer types of vegetation prevent choughs from accessing invertebrates in the soil.

However, the very intensive agricultural practices that are typical of Ireland's midlands and southeast (heavy use of pesticides, fertilizers, and machinery) also reduces the number of invertebrates present in the soil.

Iveragh and the southwest of Ireland, provides a good balance of well-grazed habitats and less intense agricultural practices that ensures that invertebrates are present and available to choughs.

How can we help Irish Choughs?

The Irish landscape has unique features that are very important to choughs.

Low intensity livestock farming, with traditional grassy banks and drystone walls, can all help choughs find a stable food supply close to their nest sites.

Extra Notes:

To maintain healthy chough populations in Ireland, we must ensure that they have access to a stable supply of food within reach of their coastal nest sites. This can be achieved by maintaining the traditional grazing regimes that provide choughs with the short grasslands they need to forage for invertebrates in the soil. The field boundaries, hillocks and earth banks that contain a lot of the birds' favourite invertebrates should also be maintained in the landscape, as these features are significant for Iveragh's animal and plant-life, as well as the region's cultural heritage.

I8 Chough Activity Sheets

Have some fun using our Chough worksheets. Simply download from our website:

www.ecomusemlive.eu/choughs

We would love to see your work! You can email them to live@ucc.ie or post them on your social media channels.

Use the hashtags #IveraghChoughs, #EcomuseumLive or tag us @ecomuseumlive!

19 Llŷn Iveragh Ecomuseums

This Chough Presentation was developed as part of The LIVE Project's environmental education programme, using research carried out by Knowledge Gatherer Fiach Byrne, and Dr. Fidelma Butler and Prof. John Quinn of UCC.

This presentation and its images can be used for educational purpose only, under Creative Commons Licenses. Special thanks to Ben Porter, Linda Lyne, and Birdwatch Ireland.

The LIVE Project is developing a range of open-source educational resources focused on the natural heritage, flora and fauna of the Iveragh Peninsula in County Kerry, Ireland. If you have feedback about this presentation, or have other areas of interest, which you would like to see developed, please get in touch, email live@ucc.ie, or visit our website www.ecomuseumlive.eu

The Live Project is co-funded by the European Regional Development fund under the Ireland Wales Cooperation Programme.

















