

As the season progressed the Conservation Team conducted a logbook meeting every night in the Tavern. I went along as well and engaged with birders about seals and how they can watch them and record any disturbance/sightings. Making myself known and available for open conversations in the tavern on my lunches and afternoons also increased engagement and awareness. Lastly, engagement this year also came via blogs, social media, Facebook, Instagram.

## Conclusions

It is important to say that seal counts do not represent the total population. Some seals may have been concealed by the topography of the island shores. The surveys have been consistent and accompanied by regular checks for pups this year. It has been a very successful year, with record numbers of seals recorded. This could, in part, be due to more surveys being carried out compared to previous years. Another factor is that the easterly storms hit the island later in 2023, allowing the pups to become stronger, better swimmers and more able to survive the bad weather.

Overall, the workload and effort have been sizable. I would say that it is a large task for one member of staff bearing in mind the general responsibilities in addition to the seal surveys. Much more could potentially be achieved if the effort was shared. However overall, a very productive season, with an abundance of seals, seal pups and low witnessed mortality.

## Acknowledgements

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Finally, a thank you to Sue Sayer, Kate Williams, Marion Beaulieu, Sarah and all the volunteers from the Cornwall Seal Group and Research Trust for all their work with regards to training volunteers, taking and processing masses of photographs for the island's identification catalogue and for their general and endless kindness and passion for these wonderful marine mammals.

## References

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## FRESHWATER FISHES

Jennifer George

### SPECIES PRESENT

The three main fish species found in the Lundy ponds are the **Mirror Carp** (*Cyprinus carpio*) in the Rocket Pole Pond, the **Golden Orfe** (*Leuciscus idus*) in Quarry Pond, and the **Crucian Carp** (*Carassius carassius*) in Pondsbury and the Quarry Pond. Other fish have been recorded e.g. **Rudd** (*Scardinius erythrophthalmus*). In September 2006, The Quarterwall Pond was drying up in the drought of that year, and Roger Fursdon (Lundy Water Engineer) removed about 100 of the stranded fish and transferred them to the Rocket Pole Pond. The fate of these fish is unknown as there has been no detailed survey of the fish in Lundy ponds.

The **Mirror Carp** is a strain of the Common Carp but has characteristic reduced mirror-like scales along the body (see photo). Its length varies from 25-75cm with a weight of 10 -12kg. It can live for up to 30 years. It feeds on invertebrates and plant material and the larger ones often eat small fish. Spawning occurs in June and July amongst weeds in shallow water. It can hybridise with Crucian Carp. Spawning was observed and photographed by Dean Jones (Warden) in June 2021 in the Rocket Pole Pond. (See LFS Annual Report 2021).

The **Crucian Carp** has over 30 equally spaced scales along the body and a convex dorsal fin. It is olive green on the dorsal surface and dull brown ventrally (see photo). Its length varies from 25-45cm and has a maximum weight of 5kg. It can live for up to 15 years. As with the Mirror Carp, it feeds on bottom-living invertebrates and plant material. Spawning occurs in May and June. It is an exceptionally hardy species and can withstand very low temperatures and anoxic conditions. The **Golden Orfe**, the golden variety of the Orfe (see photo) has more than 50 scales along the side of its body. Its length varies from 25-50cm and it can live for 10 years. It is very popular with aquarists and garden pond owners. It feeds mainly on invertebrates, especially molluscs, crustaceans, insect larvae, and, when young, some plant material. It breeds in April and May and adults mature in 5-7 years.

### 2023 OBSERVATIONS

In 2023, Mirror Carp were observed in the Rocket Pole Pond in January, February (11 fish), April, May, and June. In February a very large carp approaching 45cm (18") in length was recorded with up to ten smaller fish. Maybe this large carp had been feeding on the smaller fish that had been transferred in earlier years or had consumed a surfeit of the bread often thrown into the pond by Lundy visitors.

**Golden Orfe** are very obvious in Quarry Pond (see photo) and were seen in many months of the year. In May, observers recorded 27-32 fish on four different days, with two observers listing 19 adults and 12 juvenile fish.

**Crucian Carp** were observed in large numbers in Quarry Pond particularly in May when numbers ranged from 20-100 fish.

► **Crucian Carp** *Carassius carassius*  
(photo: Alan Rowland).





▲ Mirror Carp *Cyprinus carpio* (photo: Mandy Dee).



In conclusion, the fish in the three ponds seem to be doing well, with the presence of juveniles showing that breeding is successful. A detailed survey of the fish in these ponds, as well as Pondsby and Quarterwall Pond, is required.

(Thanks to the fish observers in 2023: Chris Baillie, Chris Dee, Tim Davis, Tim Jones, Dean Jones, Alan and Sandra Rowland, Steve Rosser, Tim Smith, Richard Ware).

◀ Quarry Pond with reflections and Golden Orfe *Leuciscus idus* swimming around in May 2023. (photo: Alan Rowland).

## AMPHIBIA (Frogs and Toads)

Jennifer George

### Is the Common Toad (*Bufo bufo*) living on Lundy?

Although there have been some unverified records of the Common Toad being heard on Lundy by visitors in 2000, 2001, and 2003 (see the Report on Exotic Animals on Lundy by Alan Rowland, which follows this text), it has long been thought that Amphibia do not occur on Lundy. Amphibia are not often found on small islands as they are not good travellers.

However, on 7th May 2023, toad calls were heard near Quarry Pond by Stuart Cossey, and again on 11<sup>th</sup> May.

On 13<sup>th</sup> May, the toad was still calling in Quarry Pond, and a recording of the calls was made by Chris Baillie.

On 15<sup>th</sup> May, the toad was still calling in Quarry Pond and was heard by Jackie Watt and John Hedger, who had been seeking fungi in that area. Calls were also heard by Chris Dee and other Lundy visitors. In the afternoon, quiet calls from presumably a second toad were heard by Paul Dean and later on by Chris Dee. These calls came from the Quarry Beach footpath where a stream trickle meets the footpath.

The **Common Toad** (*Bufo bufo*), with a body length of 8-13cm, can reach a weight of 80gm. It feeds on earthworms, snails, and other invertebrates. Larger ones can eat small Slow –worms, mice and shrews.

Toads usually hibernate from October to March and breed from April onwards. They prefer the larger deeper ponds than the shallower ponds used by the Common Frog. Eggs are laid in long strings around water plants. Toad tadpoles possess toxins that make them very unpleasant for predators, and they can live in ponds with fish that often eat frog tadpoles. Adult toads also contain these toxins in their skin glands.

Toads are known for their mass migrations when seeking their breeding ponds and many are killed by cars on UK roads each year.

The Common Toad is not found on many UK islands, e.g., Scottish islands, Scilly Isles, Isle of Man, and many of the Channel Islands.

So, is Lundy unique in having a Common Toad? The Warden and Conservation Team are hoping to verify their existence now that toad calls have been heard and Alan Rowland, who is currently surveying the Lundy ponds and streams, will be looking for eggs and Toad tadpoles in the Quarry Pond.

▲ Common Toad *Bufo bufo* photographed in Cornwall (photo: Alan Rowland).

