

Tristan Darwin Project



Monitoring Guide

A Guide to Monitoring Albatross, Penguin and Seal Plots on Tristan and Nightingale

Atlantic Yellow-nosed albatross

Biology

The yellow-nosed albatross or 'molly' lays a single egg in late September in a cup-shaped nest built from mud and vegetation. Both adults incubate the egg which takes about 60 days to hatch. The chick remains on the nest until its downy feathers are replaced by flight feathers which takes around 100 days. Once airborne the bird will head out to sea and will only return to land in order to breed, which is usually when it is around 10 years old.

Where to count

Two colonies have been marked out on Tristan and three on Nightingale. Each nest has a marker post with a number written on it. A map of the nest locations and their GPS co-ordinates is shown below.

What to count

The nests should be visited twice; once to record which nests have incubating birds sitting on eggs, and again to record which nests have successfully hatched and reared a chick. If it is intended to ring the birds this should be on the sitting adult's left leg while still sitting on the egg. At this time the birds are more likely to stay with the nest and can often be ringed while the bird is still sitting on the nest – it is not necessary to pick the bird up unless it leaves the nest. If the bird is scared off its nest the egg becomes vulnerable to predators such as the skua; you should stay in the general vicinity until the bird has returned and discourage any skuas which try to take their chance. Starchies may also try to eat an unprotected egg.

It is not normally necessary to ring the chicks. If however you wish to do this then it is normal practice to fasten the ring to the chick's right leg.

You do not need to remove an adult bird from its nest to see if it is sitting on an egg – if it stays put on the nest even though you are standing very close to it then that is an indication that it is incubating – if there were no egg there the bird would have flown away.

What to record

You should write down the number of the nest and whether it has an egg or chick present. Record those marked nests which are empty too. If an adult bird has a ring then record its number, and if a new ring is being attached the number of that should be written down indicating which leg it is on. These records should be entered into the Excel spreadsheet MOLLY.XLS for each colony

Timing

The first visit to count the mollies on eggs should be made between the end of September and the end of November. The second visit to count the number of chicks should be made between the beginning of January and the end of March.

Details of monitoring sites

Nests are numbered in a logical sequence. In most cases it is useful to have a printed map with you to help locate the nests; although each has a GPS fix it can be confusing when nests are close together or partially hidden, the map will help you to tell which direction you should be looking (the GPS is not accurate enough to pinpoint each nest exactly, but once you've found one the map will give you an idea where the next one should be).

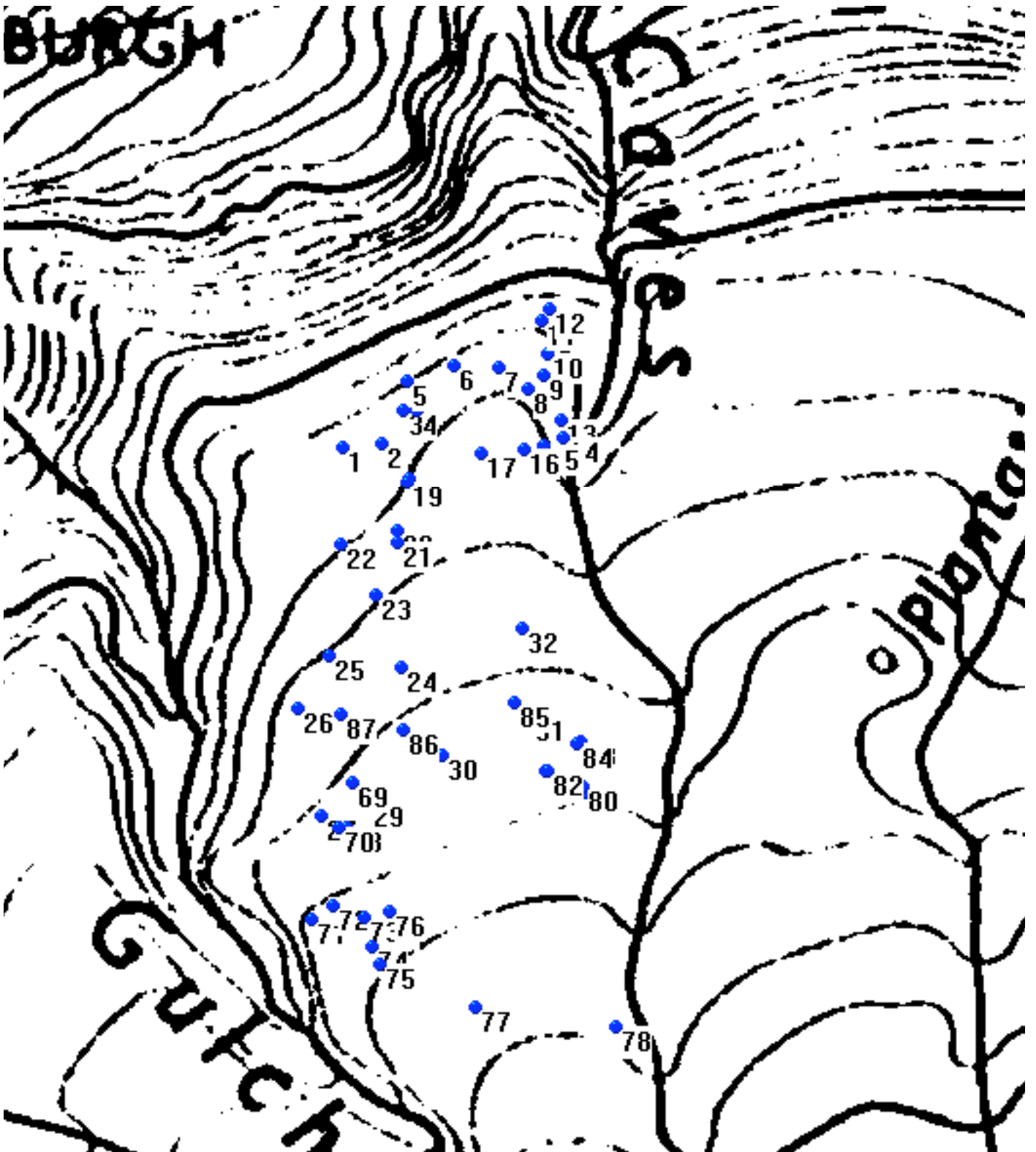
Tristan

1. Hottentot Gulch Colony

There are 51 nests situated between caves gulch and Hottentot gulch, extending from the edge of the base to an altitude of 2800 feet. Nests waypoints are numbered 1 to 32 and 69 to 87.

GPS location file Hottentot molly nests.mmo

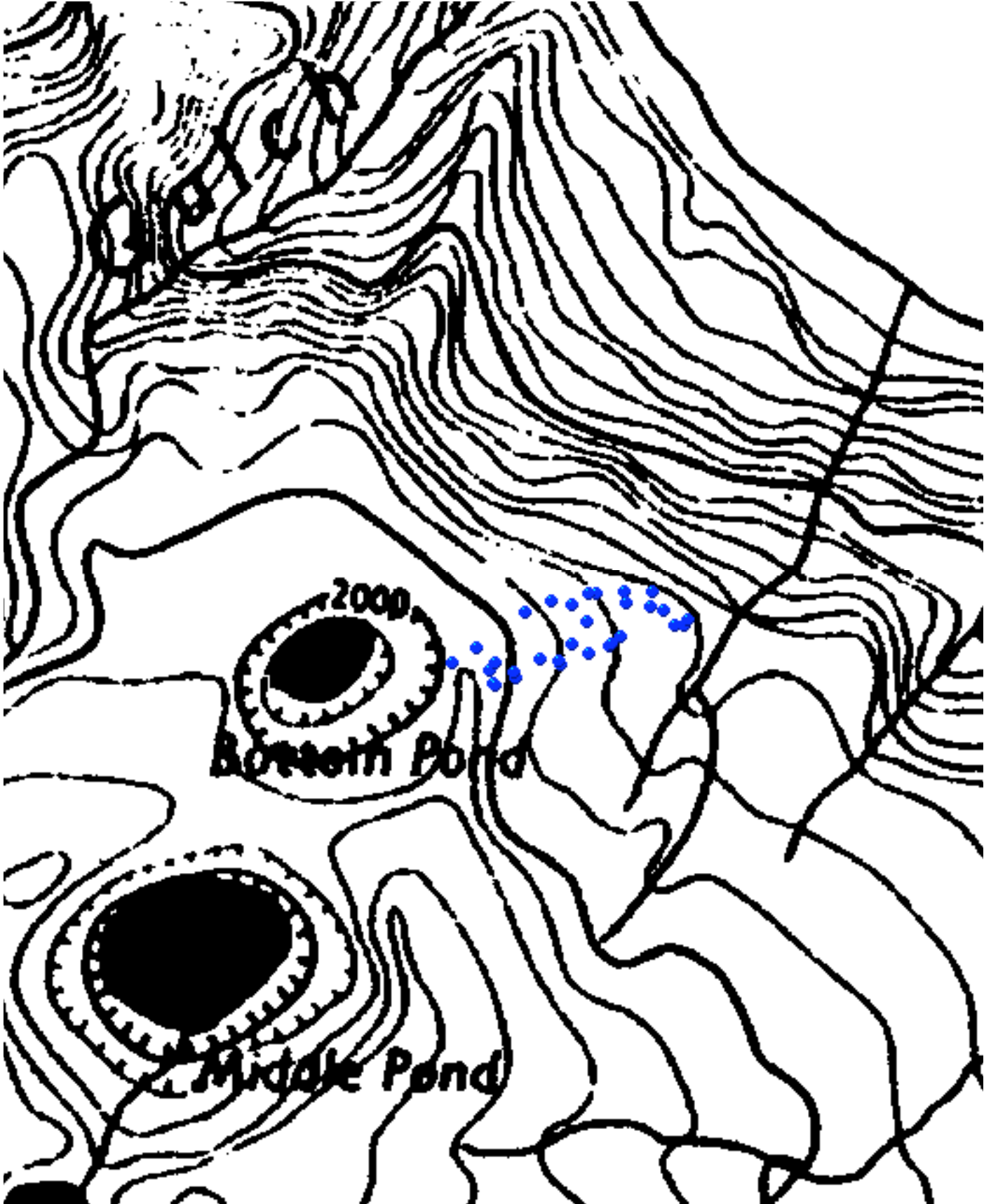
MAP



2. Ponds colony

This colony is situated between the seaward edge of bottom pond and the edge of the base. There are 30 nests marked here. Some nests are partly hidden by trees so it may be necessary to search for them.

GPS location file ponds molly nests.mmo
MAP

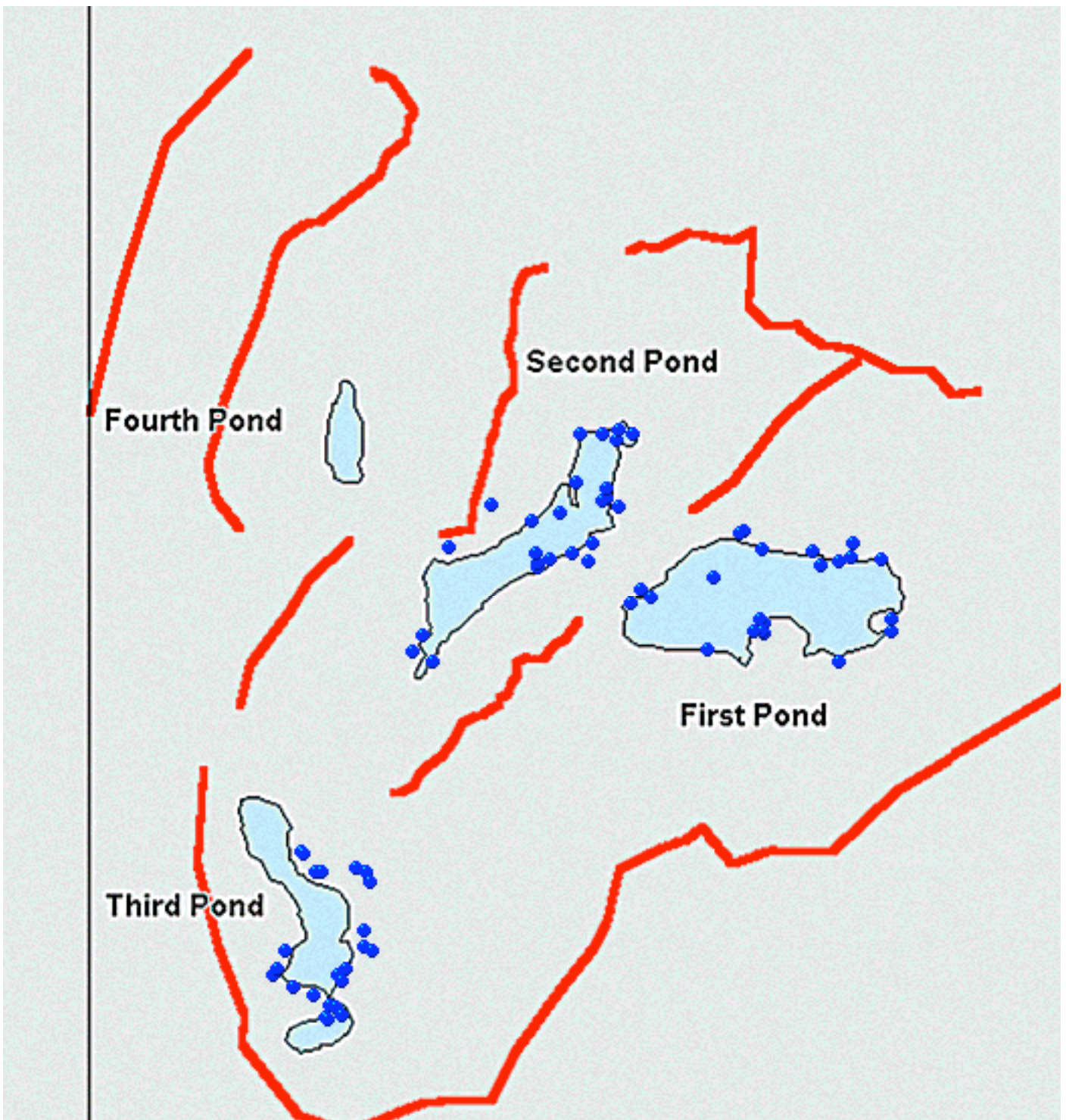


Nightingale

The marked nests are at first second and third ponds. In each case the nests are mostly situated around the edge of the pond. There are 25 nests marked at each pond. Unfortunately these have not been marked in a logical order so a map will be necessary to locate any nests that are difficult to find.

GPS location file nightingale ponds molly nests.mmo

MAP



Northern Rockhopper Penguins

Biology

Like all penguins, the rockhopper penguin is a totally marine bird that only comes to land to breed; the rest of its life is spent far out to sea. This bird makes a simple nest consisting of a scrape in the ground lined with a few bits of grass, and normally lays two eggs. Penguins nest in colonies called rookeries, and lay their eggs around early September. These are incubated by either bird for 60 days and hatch around early November. At first the chicks will stay with the parent on the nest but once they reach a certain size, at around 10 days old, they join together into what is referred to as a 'creche' where most parents are relieved of the duty of looking after the chicks, leaving that job to just a few adults while they spend time catching food to bring back to the growing chick. Chicks leave the rookery in late March and normally return to breed when they are 4 years old.

Where to count

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There are several rookeries around the main island of Tristan. Most of these are easily accessible and should be counted every year. Two sites on the south-east coast between stony beach and sandy point are subject to large swells and there are no convenient landing sites; these must be reached either by walking from stony beach on a calm day or swimming ashore. It may therefore not be possible to carry out a census at these sites every year.

Penguin rookeries are located at

West Jew's Point	Goat Road Gulch	Big Gulch	Tripot	Phoenix Beach	Stony Beach
East End Sandy Point		Stony Hill			

Although there are huge numbers of penguins breeding on Nightingale and its offshore islands no monitoring plots have been established here as yet.

What to count

At each site the number of occupied nests with incubating eggs or chicks present should be counted.

Although there are likely to be many empty nests occupied by adult birds it is not necessary to disturb all sitting birds to find out if the nest has eggs or chicks present. Chicks, unless they are very small, can usually be seen beneath the adult bird, while adult birds that are incubating eggs have a very distinctive hunched appearance as they sit on the nest, they seem to spread themselves as wide as possible over the nest. It is necessary however to view the colony from different angles since many nests will be hidden from view behind rocks, and in many cases nests can be found in small caves beneath large boulders.

It is not necessary to count the adult birds.

What to record

For each rookery you should write down the number of nests with adults sitting on eggs or chicks. None of the nests are marked but a map of the rookery can help ensure that all parts of the rookery are checked.

Maps are available for Jew's Point, and East end Sandy Point and Trypot.

These records should be entered into the Excel spreadsheet penguins.XLS for each rookery

Timing

Penguin colonies should be visited once between the time after the eggs are laid and before the chicks leave the nests to join together into a crèche. Visits should ideally be made some time between the middle of October and the first week in November.

Fur Seals

Where to count

There is only one seal colony of any magnitude on Tristan and this is situated at Cave Point at the south end of the island. Seals can be recorded from walking around the shore on foot taking care to avoid aggressive adults – in particular try not to get between a seal and the water, where it may feel its escape route is cut off. Females with pups are also likely to show more aggression if approached too closely.

What to count

It is only necessary to count the new pups. These will be small and black at this time of year and will usually be found with their mother.

You may also wish to count the number of male and female adults present but this is likely to vary considerably over a short time period as they frequently return to the water to feed.

What to record

Write down the number of seal pups seen. If any elephant seals are present then this is worth recording too.
Computer file: seals.xls

Timing

Seal pups are best counted between the end of December and the middle of January.

A second visit might be useful but only to find pups that were previously hidden; they are unable to go to sea when this young so will stay in the same area until they are old enough to swim.

Maps

