

"The health of our oceans is intrinsically linked to the future of life on this planet"

# **PRE-DIVE BRIEFING PACK** Eco-Region 6b

Europe - Sub-polar



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# 1.0 General Information

This booklet is a **pre-dive briefing pack** for the **Europe Sub-polar** eco-region. Please feel free to print it and take it with you as an 'aide memoir' for your dive. It contains all the information you need to contribute to the **EARTHDIVE** Global Dive Log.

# 1.1 Introduction

The **EARTHDIUE** Global Dive Log is a pioneering methodology that has been developed in partnership with **UNEP-WCMC** and marine scientists from around the world. These marine scientists helped establish thirty **EARTHDIUE** eco-regions - areas of water that share a relatively similar climate and contain a common assembly of natural habitats and species. They then identified key indicator species for each region - an important set of marine animals whose numbers and changing population can tell us a lot about the changing state of our oceans.

You can help observe and record sightings of these marine animals during a dive or snorkel trip and enter observations into the **Global Dive Log**. You can also record evidence of key anthropogenic pressures - changes in the marine environment brought about by human activity such as pollution and overfishing. Any data you enter onto the **EfRTHDIUE** website can be viewed by you and other visitors.

The **EfRTHDIUE** eco-regions span all of the world's oceans - not just those areas with warm water and coral reefs. Whether you are diving in Scotland or Saint Lucia, Connecticut or Cocos, Denmark or Dominica, your data collection is equally valid and valuable. So you don't have to wait for the next exotic dive trip - home waters are just as important!

Each eco-region also has its own types of megafauna, from dolphins to whale sharks, from whales to polar bears (if you like really cold water) and provision is also made in the Global Dive Log to record sightings of these exciting animals.

Collecting this valuable information for **EfIRTHDIUE** helps create a **Global Dive Log** - a valuable research tool.

This briefing pack lists the indicator species and anthropogenic pressures for the **Mediterranean** eco-region.

Thank you for recording scientific information for **EARTHDIVE**.

# 1.2 How to record your observations into the Global Dive Log

When recording scientific information for **EfRTHDIUE**, divers are recommended to follow our 7 Point Plan. You will find the use of a slate or some other method of taking notes underwater, such as a laminated fish identification card, invaluable. Always try to transfer your data to the **EfRTHDIUE** website as soon as possible following your dive. Let dive buddies and dive leaders know what you are measuring, as they may be able to help with some post-dive questions on identification.

- **1.2.1** Try and ensure that the time of the underwater recording session is accurately noted. The length of the session can be all of the dive or just a period during the dive e.g. 10 minutes. You may even spend periods of time recording different indicators. For example there may be a dense aggregation of drums, which you count for 10 or 15 minutes. On the other hand you may look for other species such as groupers for most of the dive. Whatever your choice, the data is important so try to add the recording time in the notes for each indicator.
- **1.2.2** When possible always record <u>actual</u> counts of indicator species. If this is too difficult on the dive then enter your data into the abundance scale in the Global Dive Log as an estimate.



- **1.2.3** Only record an indicator to species if you are 100% certain that it is that species. Otherwise record to genus or to family, e.g. an indicator for the sub-tropical Atlantic Coast of South America is the dusky grouper (*Epinephelus marginatus*). If you are uncertain of the species but recognise the genus, call it *Epinephelus sp.* If you do not have time to recognise it, or do not know it apart from that it is a grouper, then just record it as that it's just as important!
- **1.2.4** Record as much background as possible in the notes section of the Global Dive Log for each indicator, i.e. depth of sighting, type of habitat (lower reef slope, kelp bed, sand with scattered rocky outcrops etc). Particular behaviour should also be noted spawning behaviour in fish or invertebrates for example.
- **1.2.5** When recording always fin slowly and evenly with minimal sudden movements. Moving rapidly will disturb resident fish causing them to hide from view more quickly. By moving slowly and evenly you have more chance of seeing indicator species and recording their presence/absence more accurately. Always look carefully for particular indicators such as lobsters, which are often under overhangs or in crevices.
- **1.2.6** On your way to and from your dive site, record any observations you have made regarding the listed anthropogenic pressures for this eco-region.
- **1.2.7** Following your dive, make notes from your slate or memory and keep them in a safe place. Add any further comments within 24 hours before you lose some of the detail from your memory.

### Thank you

# 2.0 The Europe - Sub-polar Eco-Region

This region comprises the waters around Iceland and the Norwegian provinces (fylke) of Hordaland; More og Romsdal; Nordland; Nord-Trondelag; Sogn og Fjordane and Sor-Trondelag.

The island that is Iceland rises from the crest of the mid-Atlantic ridge, where the European and American continental plates are moving apart, causing the formation of oceanic crust. This is the reason that this area is the most geologically active in the world.



The Ocean currents move in a clockwise spiral around Iceland. The North Atlantic Current begins off the North American Grand Banks, where the Gulf Stream begins to fork. It consists of northerly and easterly currents terminating in subsidiary currents. One of the major subsidiaries is the Irminger Current that flows westward off the southern coast of Iceland. Another is the Norwegian Current that flows beyond the Norwegian Sea into the polar seas. These and other subsidiary currents separate the relatively warm and saline waters of the Atlantic from the cold, fresh Arctic waters of the Iceland Sea and Norwegian Sea to the North and Northeast.

The Icelanders have a heavy economic independence on fishing, and key commercial species include cod, redfish, haddock, halibut and more recently, deepwater shrimp. Overfishing remains a problem, but otherwise these waters and coasts are pristine.

For the average recreational diver, diving in Iceland might not immediately appeal. However, Iceland has at

least 2 diving sites that are unlike anything else anywhere. One is Silfra a crack in the earth between the European and the American plates. Year round diving in crystal clear water at a relatively constant temperature of 1-3°C is possible here. And for warm water diving (well, relatively), try Str\_tan, a thermal chimney in



Eyjafjordur where hot spring water rises from 70 metres up to 15 metres.

Like Iceland, fisheries are a significant part of the Norwegian economy, with fish products being exported to over 150 countries. The fishing and aquaculture industries employ some 33,000 people in the 500 fish processing plants and many fish farms along the North Norwegian coast. Of these, fishermen at sea represent almost half. (45%)

General threats to this are arise from overfishing and pollution from Norway's offshore oil industry, and the risk of oil spills in Norwegian waters. Poor weather and substandard ships have caused groundings and losses.

Important species from a conservation standpoint include the grey seal (*Halichoerus grypus*), harbour seal (*Phoca vitulina*), Artic cod (*Boreogadus saida*), Artic char (*Salvelinus alpinus*), capelin (*Mallotus villosus*), minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), beluga whale (*Delphinapterus leucas*), narwhal (*Monodon monoceros*), bowhead whale (*Balaena mysticetus*), bottlenose whale (*Hyperoodon ampullatus*) and blue whale (*Balaenoptera musculus*).

# 3.0 Indicator Species

What to look for and record in the Europe Sub-polar eco-region:

Lobster (Homarus gammarus) Low numbers are indicators of overfishing

Red King Crab (*Paralithodes camtschatika*) *Invasive alien* 

Edible crab (*Cancer pagurus*) Low number are an indication of overfishing

Scallops / queenies (Pecten maximus and Chlamys islandica) Low numbers are indicators of overfishing

Dead mans fingers (*Alcyonium digitatum*) Low numbers are an indication of collateral damage from fishing activities



The International Union for Conservation of Nature and Natural Resources (IUCN) provides a listing of species that are at risk of global extinction. The 'IUCN Red List Categories and Criteria' are intended to be an easily and widely understood system and can be found at http://www.redlist.org The general aim of the system is to provide an explicit, objective framework for the classification of the broadest range of species according to their extinction risk. If any of the indicator species for this Eco-Region have been classified as Critically Endangered, Endangered or Vulnerable on the list, then we have included that information below.

### 3.1 Lobster (*Homarus gammarus*)

Lobsters, like shrimps and crabs, are decapods – literally meaning 10 legs - and can be found in all of the world's tropical and sub-tropical seas as well as more temperate waters. They are predatory, nocturnal animals with a vividly decorated coat. They are often numerous locally; they linger in crevices (with their long antennae sticking out) during the day and hunt small benthic organisms at night, but

they also feed on organic detritus whenever they happen across it. As with all crustaceans, the lobster moults or sheds its shell to grow.



Up until the end of the 19th century lobster was so plentiful that it was often used as fish bait. Sadly, with lobster's ever-increasing popularity those days are now gone forever. Lobsters have recently suffered a dramatic demographic decline; intensive fishing has annihilated entire populations, especially where tourism abounds.



The lobster families that are typically encountered by divers in many underwater locations around the world are the spiny rock lobsters, *Palinuridae*, the slipper lobsters, *Scyllaridae* and the true reef lobsters, *Nephropidae*.

The spiny lobsters rock lobsters, lack the enlarged claws of the true lobsters. Various species of spiny lobsters occur around the world; the most common genus is *Panulirus*. Commercial catches originate largely in the waters off South Africa and Namibia, Australia, New Zealand, France, Japan, Brazil, Cuba, the U.S., Mexico, and the Bahamas.

There are three species of true lobsters: the **American lobster** (*Homarus americanus*), the **European lobster** (*Homarus gammarus*), and the **Norwegian lobster** (*Nephrops norvegicus*). The American, also called Maine or northern lobster, occurs only off the eastern coast of North America, from Labrador to North Carolina, but is so closely related to the European lobster, that geography is the primary differentiating characteristic. Both the European and Norwegian lobsters can be found in this eco-region. We are particularly interested in recording sightings of the European lobster.

European lobsters, like their American cousins, are unmistakable with their massive, almost bulbous pair of chelapeds (claws) and deep blue carapace, whereas the chelapeds of the Norwegian lobster are relatively longer and thinner. In the true lobsters, these chelapeds are unequal in size, one being used for crushing, one cutting.



The European lobster is omnivorous with a diet consisting of benthic (bottom dwelling) invertebrates, crabs, sea urchins, mussels, marine worms, periwinkles and sea stars. Fish and plants also contribute to the diet. Whilst the largest recorded catch of a European lobster is 1.26m, sizes that will typically be seen of mature lobsters will be 30-50cm.

These lobsters will avoid light, and are found on rocky substrata, living in holes and excavated tunnels from the lower shore to depths of 60m, using their compound eyes (at the end of moveable stalks) to detect movement.

**The Norwegian lobster, also known as the Dublin Bay prawn**, is a small lobster, pale orange in colour. It grows to a maximum total length of 24 cm, although is normally between 18-20cm.

### 3.2 Red King Crab (Paralithodes camtschatika)

Originating from the Sea of Okhotsk in the Camchatca region of eastern Russia, the red king crab (*Paralithodes camtschatica*) was introduced to parts of the Russian waters of the Barents Sea in the 1960's. In the mid 1970's, individual specimens started to appear as bycatch on both sides of the shared Russian/Norwegian border. Since that time, bycatch numbers have increased significantly in the region.

The king crab is a valuable food source and is the most commercially important of all crabs. Whilst a number of studies have examined the optimum harvesting strategies for the species in the region, very little has been done to understand the potential ecological impact that the species will have in non-native waters.



The crab's diet appears to include a wide range of organisms, especially polychaetes worms, small bivalves such as clams and echinoderms like sea urchins and starfish. It consumes large quantities of food relative to its body size; creating concern that serious depletion of some benthic (bottom dwelling) species may occur where there are high concentrations of crabs in a limited area. The crab may well be a significant food competitor of bottom-feeding fishes.



The red king crab population is dramatically rising in numbers and spreading in distribution. The Barents Sea population has increased six-fold since 1995, with an estimated 12 million members of the species now resident.

The crabs can be found at depths ranging from the shoreline down to 400 metres, depending on size, age and season.

One of the largest crabs, in the Arctic it can grow up to 1.5m and weigh up to 10 kg. King crabs are unique in that they have only 6 legs while most crabs have 8. When alive, it is actually dark burgundy in colour.

There are two other species of king crab, but they are not found in these waters. These are the blue king crab (*Paralithodes platypus*) and the smaller brown or golden king crab (*Lithodes aequispina*)

### 3.3 Edible Crab (*Cancer pagurus*)



Edible Crab (Cancer pagurus)

The common edible crab (*Cancer pagurus*) leads a benthic (bottom dwelling) existence living on a wide range rocky substrates, bottoms of sand or gravel and at depths from 6 to100 metres, although between 6 and 30 metres is more typical. The species is distributed from northern Morocco to northern Norway at latitude 70 degrees.

It has a heavy, broadly oval shaped body, which is rather convex with very faint grooves. The edible crab is readily distinguished from other species by the round lobes at the front of the carapace giving a 'piecrust' effect and the presence of massive black tipped chelae (pincers). The pincers are smooth and slightly unequal in shape. The last four pairs of legs are roughened by numerous groups of very short stiff black hairs. The carapace is reddish-brown in colour, with a yellow-white colouration on the underside.

Very large, older specimens can have carapace width of up to 25 cm, although 15 cm is more typical. Females have a broader posterior flap on the underside, in which they carry up to two million eggs for seven to eight months. When the larvae hatch, they are pelagic during the first few months, and the great majority is eaten or dies before the few survivors settle on the sea floor. Edible crabs do not reach maturity until they are five or six years old.

Crabs are scavengers ready to take advantage of any detritus, but they also feed on molluscs and mussels, which they crush with their large claws.

### 3.4 King Scallops and Queenies (Pecten maximus and Chlamys islandica)

Scallops are bivalve molluscs with scalloped, fan-shaped shells (valves) whose shape and colour have inspired artists architects and designers for centuries.

The shells are further characterized by radiating ribs or grooves and concentric growth rings. Near the hinge, where the two valves (shells) meet, the shell flares out



on each side to form small "wings". Just inside each valve along the edge of the mantle there a row of short sensory tentacles and a row of small blue eyes.

A single adductor muscle, sometimes called the 'eye' in culinary circles, opens and closes the two valves. Because they are active swimmers, the adductor muscle is more developed in the scallop than in oysters and clams. The muscular snapping of the shells togethers generates the propulsion needed for movement through the water. They s feed on microscopic plants and animals.

The great scallop, also known as the **king scallop** or Coquille St Jacques, has thick, solid shells, with 16 radiating ribs. The left value is flat and the right shell is quite convex. The right value is off-white, yellowish, or light brown in colour, often with bands or spots of darker pigment. The left value is light pink to reddish brown. It rests on the right value in a depression in sand or fine gravel, from just offshore, to depths of 100 metres. The king scallop can grow up to 15 cm long.

The Icelandic scallop (*Chlamys islandica*), also known as **Queenies**, range in colour from brilliant red, purple, orange or yellow to white. The normal habitat is a hard sea bottom at depths of 15-80 m and they are most abundant in fairly strong nutrient rich currents. Queenies grow rather slowly and mainly in the spring and summer months. Ten-year-old scallops measure 6.5-8.5 cm in height. It differs from the king scallop in that it is smaller, with more pronounced grooves.

Low numbers of scallops are, unsurprisingly, indicators of overfishing.

# 3.5 Dead Mans Fingers (Alcyonium digitatum)

Dead mans fingers (*Alcyonium digitatum*) are colony building soft corals that are classified as *Octocorallia*, a group which also includes sea pens and sea fans.

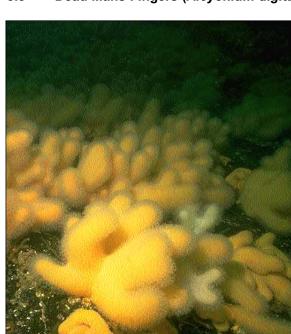
This group of corals is characterized by the eight tentacles clustered around the mouth of each polyp in the colony. The tentacles sit in a circle around the edge and have small branches. Corals in the family Alcyonaria have a horny or leather-like skeleton supported by calcareous pins.

Colonies consist of small coral polyps and are white or orange in colour, but may appear reddish or brownish during periods of inactivity when the individual polyps are withdrawn into the colony. They can be found attached to a variety of substrates, including rocks, shells and stones, where currents are moderately strong to strong. They are occasionally found on the lower shore, but are more common from just below tide level (sublittoral) down to 50metres and sometimes to 100metres. The feathery white polyps appear when feeding.

Mature colonies form thick, irregularly shaped fleshy masses, typically of stout, finger-like lobes that usually exceed 20 mm in diameter. Young, developing colonies form encrustations of 5 -10mm thick. The height and breadth of colonies are up to 200 mm.

Dead mans fingers is often a predominant member of large scale fouling accumulations on offshore structures, where its presence increases drag and can cause corrosion.





Dead Mans Fingers (Alcyonium digitatum)





Note: Many species of fish and plants are known by different names in different locations. Where appropriate, we provide the recognised scientific name, but in the case of common names, for the sake of consistency, we have used the common names as they appear in the fishbase.org database as our default name.

# 4.0 Anthropogenic Pressures

**EARTHDIVE** is recording five different types of anthropogenic pressures (effects resulting from the actions of humans). Collection of this data enables us to establish an ever-evolving **Global Snapshot** of our oceans.

The types of anthropogenic pressures are the same for each region and are:

•	Surface Pressures	paper, wood, plastic and any other man-made debris
•	Boat Activity	pleasure, fishing, commercial
•	Subsurface Pressures	litter, sediment, physical damage
•	Evidence of Fishing	pots, traps, discarded nets, blast damage, cyanide damage, other etc.
•	Coastal Development	resorts, villages, towns, distance from the dive sites etc.

Please note any information you feel is relevant and record the data in the notes section for each impact in the Global Dive Log.

#### Thank you.

# 5.0 eCORD

**EARTHDIUE** asks all scuba divers to subscribe to the principles of **eCORD** - the **EARTHDIUE** Code of Responsible Diving - and to encourage others to practice them. **eCORD** is a straightforward 7 Point Plan which will help divers to limit the anthropogenic impact of recreational diving - while at the same time making their diving experiences more rewarding and enjoyable. Be sure to incorporate the 7 points in your dive planning!

### 1. Know your limits.

Every dive is different and every diver is different. Always ensure that you dive within the limits of your training and experience, whilst taking due account of the prevailing conditions. Take the opportunity to advance and extend your skills whenever that opportunity arises. In particular, buoyancy skills can become a little rusty after any prolonged absence from the water. If you can't get pool or confined water practice before your trip, get your buoyancy control checked out by a qualified instructor on your first dive! There are many national and international dive training organisations which offer a comprehensive range of courses and instructional material beyond basic skills level. Take advantage of them!

### 2. Be aware of the marine environment and dive with care.

Not surprisingly, many dive sites are located where the reefs and walls play host to the most beautiful corals, sponges and fish - fragile aquatic ecosystems! Starting with your point of entry, be aware of your surroundings: never enter the water where there are living corals, water plants or reeds. Once underwater, it only takes one unguarded moment - a careless kick with a fin, an outstretched hand, a dragging gauge or

octopus - to destroy part of this fragile ecosystem. Even fin kicks too close to the reef or sand can have an adverse effect - so dive with the utmost care. Photographers in particular need to take greater care as they strive for that best-yet shot! Don't let your dive become an adverse anthropogenic impact! And remember that these rules apply just as much to 'hard' dive sites - such as wrecks, which have become the home of diverse marine life - as well as fresh-water and other sites.



#### 3. Understand and respect marine flora and fauna.

A large part of the joy of diving is in learning more about the plants and animals who live in this unique underwater environment. In order to survive and thrive, many living creatures disguise themselves to look like plants and inanimate objects, or develop defence mechanisms such as stings. Some even do both! (Have you seen a stonefish lately?) The **EffRTHDIUE** briefing packs (available by download only) provide information about indicator species for the region in which you are planning to dive. In addition, dive training organisations run marine naturalist and identification courses. The more that you learn, the more that you will see, the more that you will derive pleasure from your underwater experience - and the safer you will be for yourself, other divers and the marine environment!

#### 4. Don't interfere.

First and foremost, be an observer in the underwater environment. As a general rule, look don't touch. Remember that polyps can be destroyed by even the gentlest contact. Never stand on coral even if it looks solid and robust.

Always resist the temptation to feed fish and discourage others from doing so. You may interfere with their normal feeding habits, damage their health and encourage aggressive behaviour. Leave only your bubbles!

#### 5. Take only what you need.

The marine environment is a valuable source of food for mankind and it is important that it remains so into the future. If you are among those divers who enjoy taking food from the sea, observe some simple rules:

- Obtain any necessary permits or licenses.
- Comply with all relevant fish and game regulations. These are designed to protect and preserve fish stocks, the environment and other users.
- Only take what you can eat. If you catch it and can't eat it, put it back.
- Never kill for the sake of 'sport'.
- Avoid spear fishing in areas populated by other divers or visitors to the area, or where you might cause collateral damage.

Don't be tempted to collect shells, corals or other mementos of your dive. If you want a souvenir, take a photograph!

### 6. Observe and report.

As an **EARTHDIUE** member, you will be in a unique position to monitor and report on the health, biodiversity and any obvious damage to dive sites using the **EARTHDIUE** Global Dive Log. In addition, we would encourage you to report anything unusual to the appropriate local marine and environmental authorities, or if this is difficult, get your dive centre to do it for you. They have a vested interest in a healthy marine environment, and will normally be more than willing to help. Always be on the lookout for physical damage, fish stock depletion, pollution and other environmental disturbances. If the dive operation itself is causing damage -say by anchoring to the reef - then let them know how you feel in no uncertain terms!

#### 7. Get involved.

No matter where you are diving or snorkelling, be it at home or abroad, there will be at least one (and often many more) marine conservation bodies who are active in the area. Don't be afraid to approach them for information, to offer help, or just to find out what they have to offer. You will receive an enthusiastic welcome! They will provide you with lots of opportunities to contribute to marine conservation.



# 6.0 Appendices

Post Dive Recording Sheet - General Data (complete/add/delete/tick as applicable)					
Dive No: Dive Site Name:					
GPS: N/S: E/W: (Decimal Degrees up to 7 decimal points)					
Date: // // Boat Shore Water Type: Salt //Brackish//Fresh					
Dive Type: Recreational  Technical  Training  Drift  Search  Wreck  Drift  Night  Other					
Time In:       Image: Second sec					
Air/Nitrox Start: End: (psi or bar) Max Depth (ft/m)					
Visibility:f/m Temperatures: water:ºC/ºF air:ºC/ºF					
Current: None 🗌 Light 🗌 Medium 🗌 Strong 🗌 (tick)					
Surface Conditions: Cloudy Sunny Partly Cloudy Rain Variable other					

# IF DIVING WITH A CLUB/DIVE CENTRE/LIVEABOARD OR RESORT, WERE YOU GIVEN AN ENVIRONMENTAL BRIEFING: YES 🗌 NO 🗌

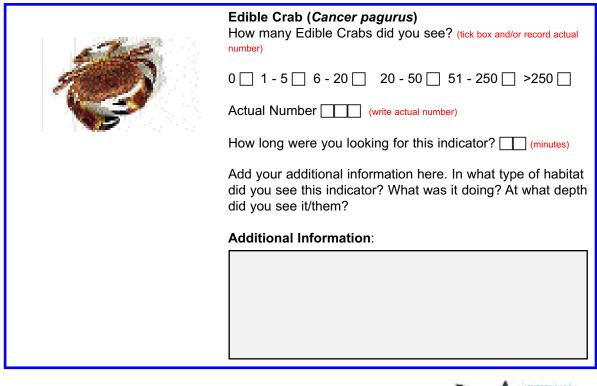
Please record any other information you normally record immediately following a dive. Add this data to the **earthdive** website via your control panel as soon as possible. **Thank you** 

#### Post Dive Recording Sheet - Indicator Species

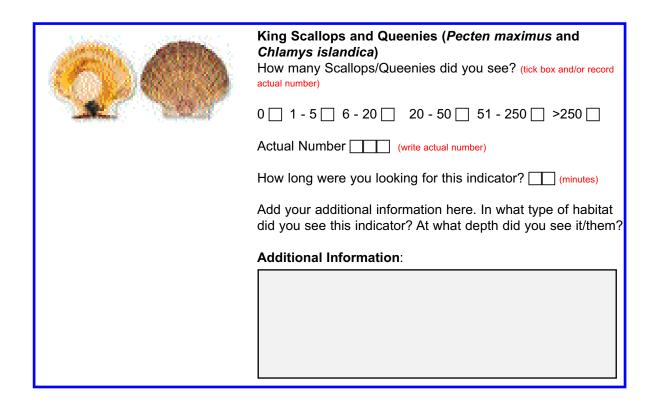
**Important Note:** If you allocated some time to looking for one of the indicator species, but didn't find any, please make sure that you record a **0 (zero)** count in the appropriate box, and record how much time you spent looking for the indicator.

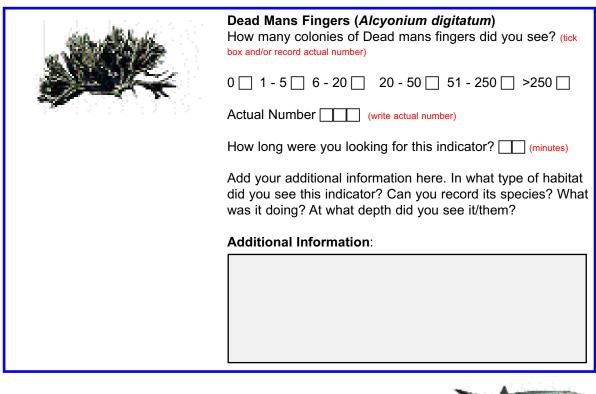
and a	Lobster ( <i>Homarus gammarus</i> )
North Carlo	How many Lobsters did you see? (tick box and/or record actual number)
	0 🗌 1 - 5 🗌 6 - 20 🗌 20 - 50 🗌 51 - 250 🗌 >250 🗌
	Actual Number (write actual number)
	How long were you looking for this indicator? [ (minutes)
	Add your additional information here. In what type of habitat did you see this indicator? What was it doing? At what depth did you see it/them?
	Additional Information:

E	<b>Red King Crab (</b> <i>Paralithodes camtschatika</i> <b>)</b> How many King Crabs did you see? (tick box and/or record actual number)		
TR. AN	0 🗌 1 - 5 🗌 6 - 20 🗌 20 - 50 🗌 51 - 250 🗌 >250 🗌		
1 246	Actual Number (write actual number)		
	How long were you looking for this indicator? [ (minutes)		
	Add your additional information here. In what type of habitat did you see this indicator? What was it doing? At what depth did you see it/them?		
	Additional Information:		













	Did you soo any Surface Litter? (Surface)
	Did you see any Surface Litter? (tick box)
DEVENSION	Yes No Dont Know
	any details (plastic, wood, paper, other etc.) Please record quantity and
other relevant informa	ation.
	Boat Activity
WILL ARE (	Boat Activity Did you see any Boat Activity? (tick box)
WILL ARE A	Did you see any Boat Activity? (tick box)
	Did you see any Boat Activity? (tick box) Yes No Dont Know
If yes please record a etc)	Did you see any Boat Activity? (tick box)

	Subsurface Pressures				
1.2.10	Did you see any Surface Litter? (tick box)				
	Yes 🗌 No 🗌 Dont Know 🗌				
If yes please record any details (litter, sediment, physical damage, coral bleaching other etc).					

A TRACE AND	Evidence of Fishing				
	Did you see any Surface Litter? (tick box)				
	Yes 🗌	No 🗌	Dont Know		
If yes please record any details (pots, traps, discarded nets, blast damage, cynanide damage, other etc).					

Evidence of Coastal Development
Did you see any evidence of Coastal Development? (tick box)
Yes No Dont Know
If yes please record any details (resorts, villages, towns, distance form the dives site etc).

#### Evidence of the illegal trade in endangered species

Any observations you make below and record in the Global Dive Log will be passed onto **TRAFFIC**, the world's wildlife trade monitoring network.

**TRAFFIC** works to ensure that the trade in wild plants and animals is not a threat to the conservation of nature. It has offices covering most parts of the world and works in close co-operation with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). **TRAFFIC** is a joint programme of WWF and IUCN-The World Conservation Union.

		evidence at any	endangered species / time during your holiday/dive trip d species. (tick box)		
© Elizabeth Fleming Turtle shell ornaments on display	Yes 🗌	No 🗌	Dont Know 🗌		
Please refer to the TRAFFIC	If yes please record any details (the species, sale location, and any other available information). Please refer to the <b>TRAFFIC</b> Guide for more information concerning species identification, local laws, and contact information of <b>TRAFFIC</b> to report offences.				
			TRAFFIC _		

