

A GUIDE TO SPEARFISHING

Spearfishing is a popular and well established sport worldwide. It attracts large numbers of enthusiasts, the majority of whom are happy to fish for the pleasure of catching their next meal, but there is also the opportunity to fish competitively at local and national level and for the lucky few, the privilege of representing their Country in European and World Championships.



British waters can provide some of the best Spearfishing in the world, once the hunter has mastered the basic techniques and the problems posed by our cold water, strong tides, rough seas and limited underwater visibility. In fact the spearfisherman who is successful in British waters can confidently expect to be able to cope with the conditions found anywhere else in the world ! Having said that, there are many areas of our coastline that provide good visibility and safe snorkelling for the beginner. Interest in Spearfishing has risen in the last few years especially in the competitive field. To date this interest has been mainly confined to the South and South West of England, although there are many other areas that provide equally good fishing.

HOW TO GET STARTED

By far the safest way of course is to join a club and benefit from the know-how of experienced spearfishermen. A list of useful addresses can be found on the contacts page on the BSA website www.underwaterfishing.co.uk

Spearfishing is carried out with only a snorkel and not with the assistance of underwater breathing apparatus and so it is essential that safe snorkelling is mastered first. It is not intended that this guide should cover all aspects of learning to snorkel as there are a number of excellent publications covering this topic.

Having learnt to snorkel and to hold your breath for a minimum of 30 seconds underwater, you should be able to proceed to basic Spearfishing techniques.

ARE YOU FIT TO SPEARFISH ?

The sea is a changeable and potentially hostile environment and must be treated with the greatest of respect. With this in mind, the following advice is given.

As a minimum, you should be able to swim at least 200m. without fins and be in good general physical condition. If you have a history of lung or respiratory problems; or circulatory or heart disorder, it would be advisable to seek medical

advice before Spearfishing. It is unwise to snorkel when suffering from a cold, sinus infection, a perforated eardrum or middle ear disease. If you are fit to dive, Spearfishing can provide an effective means of maintaining cardiovascular fitness without the problems of wear and tear to joints that can accompany jogging and land based sports.

Competitive Spearfishing can demand a very high level of all round fitness from the participants because they are likely to spend up to 6 hours in the water, often in rough seas and strong currents. In addition, an unfit spearfisherman will have the disadvantage of needing to spend more time recovering on the surface between dives. All other things being equal, the diver who is able to spend the highest proportion of his time underwater, ought to have the most opportunity to catch fish. In fact, the majority of top spearfishermen, find that it is essential to follow a fitness programme consisting of a combination of circuit training, road running and pool work, especially during the winter and the early part of the season.

EQUIPMENT

Buying good quality equipment that has been specifically designed with breath-hold diving in mind, will not only save money in the long run, but is also likely to bring success that much more quickly.

Essential equipment would be - MASK, FINS, SNORKEL, WETSUIT, WEIGHTBELT, SPEARGUN, FLOAT, KNIFE and FISHKEEP; useful 'extras' would include a waterproof watch and an underwater torch.

THE MASK



The present trend is for manufacturers to produce low volume masks that fit close to the face and offer an excellent field of vision. This type of mask is ideal for breath-hold diving. Look for a mask that provides a comfortable fit on your face and gives easy access to the nose from outside the mask (to make it possible to 'clear' the ears). The lens must be of tempered glass. It is not necessary to test a mask underwater to determine its comfort and sealing qualities. Place the mask on the face covering the eyes and nose, without using the strap, inhale gently through the nose. A good fitting mask will stay in place by suction. If not reject it and try another!

THE FINS



A large powerful fin is essential for Spearfishing; only a powerful fin will provide rapid acceleration and the ability to cope with strong tides and currents. Fins are manufactured with either a shoe-type fitting or with an adjustable heel strap and both of these options are quite acceptable. Choose a fin that will fit comfortably over your foot when wearing a diving boot. If the fin is too tight it will cause cramp and if it is too loose it will be easily dislodged in the water. The most popular fin with spearfishermen incorporates a long, narrow blade made from a rigid plastic or carbon, although the carbon fins are considerably more expensive.

THE SNORKEL



Using a snorkel allows the diver to breath while face down on the surface. A snorkel with a large bore of between 2cm-2Ncm is recommended for effortless breathing. The mouthpiece must feel comfortable; silicon rubber mouthpieces have proved very effective at reducing mouth soreness. The snorkel is either attached to the mask strap or tucked underneath it to keep it in place.

THE WETSUIT



The arrival of the wetsuit has almost certainly been responsible for the rapid growth of water sports over the last twenty years. Certainly, Spearfishing would be far more dangerous and unpleasant without one. Spearfishermen generally spend long periods (2to 6 hours) in the water, so the off-the-peg suit with its leaky seams and zips does not give adequate protection from the cold. The ideal Spearfishing suit has to be a snug fit; the hood should be attached to the jacket and there should be no zips. The head is vulnerable to the cold and so the hood should cover the forehead and chin, leaving just enough space for the mask and snorkel. The trousers should also fit well,

especially at the ankles and behind the knees (a loose fit here will quickly lead to painful rubs). Many divers wear a 'long John' for extra warmth. A suit made of 5mm. neoprene ought to be adequate for most conditions in this country. There are many suit manufacturers who will make you a made to measure suit, of the correct design, for little more than you are likely to pay for an inferior off-the-peg suit .

Hard soled boots will cost a little more but will prove their worth when walking across beaches and rough rocks! Neoprene gloves provide added protection from the cold and from sharp rocks etc. Mitts with a separate thumb and forefinger are suitable - as are the more normal five-fingered gloves, whichever type you choose, it is important that they are thin enough to allow some sense of feel and to allow you to use the speargun. In mid-summer, thicker domestic gloves can prove adequate and are less restricting.

THE WEIGHT BELT



The weight belt is required to counteract the buoyancy of the neoprene wetsuit. The belt must have an effective quick release buckle that can be operated with one hand. It is obviously safer to start with too little weight on the belt. A suitable starting weight would be 10-12lbs. Weight can be gradually added to the belt until you reach neutral buoyancy at a depth of between 3m. and 5m. To do this, dive to a depth of 3m. and stop; if the weighting is correct, you should float slowly back to the surface. Add an extra 2-3lb. to the belt and dive once again to 3m. Repeat the process until you can hover at 3m. You are now correctly weighted for Spearfishing at most depths, as it is always safer to dive under weighted.

The belt should be worn comfortably tight to allow for the compression of the suit at depth. If this is not done, the weight belt will tend to become uncomfortably loose at depth.

THE SPEARGUN



The modern speargun is a potentially dangerous weapon and has to be treated with respect. The Royal Society for the Prevention of Accidents produces a WATER SAFETY CODE which states:

"Never walk about with a loaded speargun or leave a loaded gun lying about. (Spearguns are lethal weapons and when fired out of water can have a range in excess of 40 feet.)

Always unload before leaving the water. Never point a speargun at anyone, and take care when firing in murky water, you may easily hit one of your companions and cause injury."

It is worth adding; never hunt close to bathers or rod fishermen. And, if the gun is fitted with a safety catch, use it - but don't rely on it!

There are two types of speargun on the market. The first type uses compressed air for propulsion and the second uses rubber slings. Both of these types of speargun can be and are used in competition at every level. By far the most important point to bear in mind when purchasing a speargun is that a short gun will only have a very limited range underwater and will be inaccurate. A compressed air gun of approximately 90cm. in length or a rubber gun approximately 100cm. long would prove to be a wise choice for the beginner.

All modern Spearguns will give good service if they are looked after. The sea is a very corrosive environment and your gun will give longer service if it is thoroughly rinsed off under fresh water every time it is used. Any sand or mud that has collected around moving parts must be removed or rapid wear is likely to occur. On the compressed air guns, it is essential that any sand in the barrel is removed; failure to do this will lead to scoring of the barrel which in turn will allow air to be lost and a subsequent loss of power. On both types of gun it is also important to keep the trigger mechanism clean or jamming may occur. In addition, rubber deteriorates if exposed to excessive sun and heat, so keep your rubber powered gun in a cool, dark place when not in use.

THE FLOAT



The float is a most important part of the spearfisherman's equipment. Not only is it an essential safety item, it can also be a convenient method of carrying fish and equipment.

The float must be brightly coloured (orange, red or yellow) and large enough to support the diver should a rest be required. A number of objects can be used as a float; mooring buoys, large plastic containers, plastic footballs, or a partially inflated car inner tube folded in half and bound so as to be banana-shaped. The purpose made floats are either torpedo-shaped or round and are always brightly coloured; they come complete with sturdy eyes for attaching lines and equipment and have the added advantage of being deflatable when not in use.

A good-sized, brightly coloured float warns other water users to keep clear and to take care. It is essential therefore, that the spearfisherman plays his part and stays within 15m. of the float. The float must have a strong towing line of 20m. If a lead weight of about 1kg. is attached to the free end of the towing line, the float can be

anchored by dropping the weight to the sea-bed. The diver can then hunt around the float. When the time comes to move on, the weight can be retrieved and the float towed to another area. It is safer to carry the weight in your free hand rather than attached to the person. If a simple winder is attached to the float, the length of the tow line can be adjusted when necessary. Another useful item that can be carried on the float is a small meshed net bag. The net bag should be large enough to carry your equipment to and from the water and can also be used for carrying the odd crab or lobster!

THE KNIFE



A knife is an essential piece of equipment and must always be carried. In an emergency it can be used to free the diver from ropes or netting; it is also of use when killing fish and cleaning them later. All of this can be achieved with quite a small knife providing it has a robust, sharp blade. A blade of 3 to 4 inches is ideal. It is just as important to ensure that the sheath will hold the knife firmly but will also allow you to get hold of it easily in an emergency. The knife may be worn on the calf, thigh, arm or weight belt as long as it is easily accessible.

THE FISH KEEP



It would be inconvenient and time consuming to return to the shore each time a fish was caught. The usual way of overcoming these problems is to carry them on a fish keep attached to the diver, or better still, attached to the float. This is not an item that is readily available in the shops but fortunately it is easy to make up for yourself. The most popular type of fish keep consists of a length of strong cord (1 to 1Um. in length) with a stainless steel or aluminium bar attached. The bar needs to be between 6-9 inches in length, sharpened at one end and with a hole drilled centrally. If a round bar is used, a diameter of 5 or 6mm. will prove sufficiently strong. The cord is threaded through the hole in the bar and knotted.

The free end of the cord is firmly attached to the float or the divers weight belt. The bar forms a 'T' shape when hanging loose on the end of the cord, preventing the loss of fish. When a fish has been caught, it is advisable to put it on the fish keep before removing the spear; many fish have been lost by using the reverse of this procedure! The usual method of securing the fish is to thread the sharpened end of the bar through the gills and out of the mouth.

A surprisingly large number of fish can be held on a single fish keep.

It is a well known fact that spearfishermen seem to lose all sense of time when they are in the water! A reliable WATERPROOF WATCH need not be expensive but will prove to be a wise investment.

Wearing the watch next to the skin under the cuff of the suit will avoid unnecessary knocks and snagging; it is a good idea to check the watch strap regularly.

A TORCH is not essential at the start but will open up a whole new world to you! There is a great deal of marine life to be found in holes and small caves. The torch will have to be operated with one hand so a switch is essential. Attaching the torch to the wrist (with an elasticated band for safety), ensures that the torch is not lost when you let go of it.

SPEARFISHING TECHNIQUES.

First and foremost, the novice spearfisherman has to learn to take his time and perform every manoeuvre he makes as quietly as possible. Only then will he stop frightening all the fish away!

Swimming on the surface, breathing through the snorkel, diving from the surface and swimming underwater must be carried out with the minimum of noise. On the surface, most spearfishermen employ a 'cycling' motion of the legs in order to keep the fins completely underwater throughout their stroke. Inevitably, there is some loss of propulsive power, but this is less important than the advantage gained from the quieter finning action. It is also important to take breaths through the snorkel in a quiet controlled manner; the noise you make huff ing, puff ing and spitting on the surface travels a very long way underwater. Surface dives should be practiced until they can be executed silently. This is most easily achieved by first bending at the waist until the upper body is positioned vertically downwards and is completed by raising the legs quickly and quietly to a vertical position out of the water. The unsupported weight of the legs will then drive the diver downwards until the tips of the fins are far enough below the water surface for easy, quiet fin strokes to be used. As you dive deeper, pressure is likely to build up on the eardrum; this should never be allowed to reach the point where it causes discomfort as this could easily lead to a burst eardrum! It is far safer to equalise the pressure either side of the eardrum by pinching the nose firmly between the thumb and forefinger and then attempting to blow out through the nose. Try this on land, you will notice that the ears 'pop'. As you dive, your ears should be cleared whenever you feel the slightest build-up of pressure. If the ears fail to clear, do not attempt to go deeper; it is far safer to return to the surface and start again.

Once underwater, the beginner (and the expert!) will see a lot more fish if they settle down quietly on the seabed and wait rather than rushing around. Where to wait is largely a matter of experience but the following advice should prove helpful:

Areas of flat sand are the preferred habitat of only a small number of fish species (mainly flatfish). More fish are likely to be found in areas that provide cover and food i.e. rocks, reefs and wrecks- especially when accompanied by a thick blanket of kelp or stringweed. The slightest sudden or jerky movement that is made is likely to frighten away even the most inquisitive of fish and should therefore be avoided.

Once a fish has been frightened and swims off, there is little point chasing after it because this invariably leads to the fish speeding up and easily out swimming the chaser!

All modern Spearguns are designed to be held in one hand. Aim is taken along the line of the barrel, with some spearfishermen preferring to aim along the top of the barrel while others prefer to take aim along the side of the barrel. The more successful spearfishermen vary the method of aiming to suit the situation they are faced with, so be prepared to experiment! Even the most powerful Spearguns have only limited range underwater, so the real skill comes in getting close to the fish before firing. Most success will be achieved when the fish is less than 10m. From the tip of the spear at the moment of firing. Whenever possible the spear should be aimed towards the flank of the fish and with the spear at right-angles to the fish. It is usually best to hit the fish at a point just behind the gill and approximately one third of the way down from the top edge of the fish. This is because the upper half of a fish's body is mainly muscle and offers the best chance of a holding shot. Other points to remember are that glancing shots will very often fail to penetrate the slippery surface of the fish; aim slightly high to compensate for the pull of gravity and slightly in front of a swimming fish. If you are already an experienced snorkeller or S.C.U.B.A. diver, you will already have met the problems associated with the refraction of light as it passes from water to air at the glass 'window' of the facemask. The effect is to make objects appear to be twenty five percent closer than their actual distance and one third bigger than their actual size. With experience you will automatically compensate for this.

Once a fish has been held by the spear, it is often advisable to 'play' it rather as an angler might. First, put light pressure on the line attached to the spear so that the fish can be kept clear of weeds, rocks or other potential problem areas until it is safe to tow it gently to the surface or until it can be firmly gripped in the hand. It is always difficult to grip a slippery fish (and most of them are!) but it is invariably possible to get a firm hold either across the top of the head or in the eye sockets or from underneath by reaching up into the gills. Which ever method is used it is always advisable to wear gloves to protect the hands and to help the grip. Before removing the spear it is best to slip a fish keep through the gills and out of the mouth so that the catch is secure. Unless you were fortunate enough to sever the backbone of the fish with the spear, it will now be necessary to kill it as quickly and humanely as possible. A short sharp-pointed knife of the type recommended for Spearfishing, or the sharp end of the fish keep, can be used for this purpose. The fish is grasped firmly in the gills by the thumb and forefinger. The knife (or fish keep) is slipped upwards through the gills until it enters the head just between and behind the eyes where it can easily sever the unprotected spinal chord. With the fish safely held by the fish keep, the spear can be removed from the fish and the gun reloaded.

FISH RECOGNITION

The best way to learn how to recognise different types of fish is undoubtedly by referring to one of the many excellent books that are available (see appendix).

While there are many hundreds of different species of fish that you may see whilst Spearfishing, there are actually only a comparatively small number that you are

likely to see and catch. The following list includes most of these fish and should be looked up in a reference book.

- GREY MULLET British Record: 5.0kg. 11.35kg.
- BASS British Record: 8.71kg.
- POLLACK British Record: 7.63kg.
- PLAICE British Record: 4.00kg.
- SOLE British Record: 3.12kg.

SPEARFISHING AND THE LAW

No licence is required for the types of speargun described in this booklet. However, Spearguns and spears are potentially lethal and when used in a dangerous manner, the laws governing the use of an offensive weapon would apply.

Spearfishing is illegal in the non tidal reaches of Britain's rivers. No licence or permit is required for fishing in the sea around the coast of Britain.

In Britain, there is national legislation and local bye- laws governing the minimum size of fish and shellfish that may be legally taken; other countries impose similar restrictions.

CONCLUSION

One of the fascinations of this sport is that you will never know everything that there is to know about it! It is hoped that this Guide to Spearfishing will at least smooth the way to early success and that you will go on to enjoy the challenge of the sport for many years to come.

Disclaimer:- Spearfishing is potentially a dangerous sport and may subject you to many risks. Do not rely on information obtained from this guide. The British Spearfishing Association does not accept any liability for injury or death caused whilst Spearfishing