



Certain segments of the shoe industry have spent vast amounts of money and time developing various types of constructions, treatments and materials for the purpose of keeping water out of shoes. But some outdoor aquatic activities are meant to be enjoyed when it is impossible to keep the feet warm and dry. This category of footwear requires a different approach.

Walking on water

Gore-Tex
Expedition Drysuit
by Kokatat



One way or another it would appear mankind is determined to walk on water. The only totally submersible outdoor sport that absolutely makes a point of keeping the participants feet dry is fishing. Lake and river fisher people use hip or chest waders to gain better access to the fish. These

extended one-piece boot suits are made of sheet rubber or PVC coated nylon. The boot itself is of vulcanized rubber with lugged or rippled tread on the sole. Rigid metal heel plates may be added to keep the body weight down on to the stream or riverbed. The tops are secured around the waist or with braces over the shoulders. Some chest waders have inflatable tops for buoyancy and manoeuvrability and safety in deeper water. For salt- or open-sea fishing either rubber built-up vulcanized rubber boots or canvas deck shoes are popular. Another preference is for neoprene socks or booties covered with plastic sandals. Ice fishing requires insulated hunting or hiking boots with deep lugged soles or loggers caulked soles with hob nailed edges to grip the ice. Felt lined pack boots, snow boots or rubber vulcanized boots are also used to keep the feet warm and dry.

Through experience all the other water related sports (and these are numerous), have tacitly accepted the fact that it is impossible to keep water out of footwear that is constantly deluged or submersed in it. For example, yachting and

boating footwear is required to offer:-

- traction on wet surfaces
- protection from cuts, cold and wetness
- non-damaging to deck surfaces
- quick-drying
- light and comfortable
- easily removed in water (for swimming)
- won't pick up sand or pebbles in tread
- won't corrode in salt water or stain hose and feet.

The result is a choice of either a silicone impregnated leather/nylon mesh upper in a moccasin style with unit rubber stitched sole, a canvas vulcanised deck shoe or a special rubber yachting boot with high (over the calf) top-line and non-slip rubber sole. A nylon waterproof cuff is attached to the top of the boot to give maximum protection. In a heavy storm, of course, protection is a relative word. It is interesting to note that the sipped sole introduced and patented by Paul Sperry in 1935 is still the preferred tread on boating footwear. It offers non-slip protection on board and a dirt-free tread on land.

Surfers and sailboarders have their own criteria in footwear to improve performance at all levels of their chosen water sports activity. Two styles of booties are preferred for surfing and sailboarding activities: lightweight nylon (power mesh) upper with synthetic suede footbed and trim or nylon backed neoprene foam rubber wet sock with either a vulcanized or cemented sheet rubber suction tread sole. These types of ankle booties are not necessarily



The Rockport DMX Crustacean - minimal slip with sandal comfort.



Palm Profile Kayak shoe in 2.5mm neoprene.

required in warm weather climates but as maximum grip and cold weather footwear do offer an advantage over bare feet or flimsy Aquasocks.

These days, when one talks about footwear used in or around water, most people think about the Aquasock. This multi-purpose lightweight foot glove is ideal for general all purpose beach and water use. It can be used as a surfing or sailboarding shoe for traction, a beach volleyball shoe, a boating shoe or just as protection for the feet in wet rock climbing. It is simply made of elasticised power nylon mesh with an inexpensive sheet or moulded thin rubber wrap-up sole. Nike was the first to develop, or at least popularise, this utilitarian category of water shoe and it has been copied by many over the years. It is probably the cheapest, most practical covering for the feet in and around water.

Lycra/Polartec socks for scuba diving and snorkelling have taken over from the previously popular neoprene socks. Rubber flippers are worn over the socks for more efficient swimming but they also help to keep the feet warm and hold the slippery hard rubber fins on the feet.

Sculling and rowing

Sculling and rowing are different again. In these sports, footwear is used like competitive cycling shoes to anchor the feet in order to grip and push against the footboards for maximum thrust and leverage. Rowing shoes are similar to track and cycling shoes in that they have nylon plate attachments in the forepart. These are screwed directly to the footboards of the boat and, like cycling shoes, they must be easily removed from the feet in case of accidents. This is achieved via a quick-release hook-'n-loop heel closure system. Adidas is one of the few specialty sport shoe companies still offering such a shoe. Needless to say, it is not a volume seller.

A shoe that has become a big seller started as a specialty white water rafting shoe in the 1970s. It is now known as the Sport Sandal and over the years of commercialisation and modification it has taken on many different uppers and sole treatments. First developed by Teva in the USA, the sandal is, in its purest form, a simple rubber-neoprene sole with canvas or nylon strap upper. It was developed and is still used in white water

rafting to lessen bulk and weight inside the canoe or raft yet add comfort and grip if portage is necessary. The sandal is easily removable for swimming, again using hook-'n-loop.

Several companies including Ryka and Nautilus have tried to introduce footwear specifically for exercising under water, otherwise called Aquacize. The idea is to walk out to the pool in the Aquacize shoe, jump in and use various resistance devices to propel the body up and down in the pool. This shoe is really a more elaborate version of the Aquasock, using more expensive water-resistant synthetic materials and specially treated leathers. To date this category has not enjoyed large volume success but new variations such as the new Aqua Runner offering zero impact footwear for water workouts was on show at this year's Super Show. The materials mainly used in the manufacture of Aqua Runners are hook-'n-loop, EVA, neoprene and nylon mesh.

Finally, we come to the Open Running Shoe first developed by Diadora in Italy and now manufactured by several companies, including Nike. This shoe makes no pretence about keeping the foot dry when running in shallow water or the steeplechase (which is still an Olympic event). In fact, it takes the opposite approach. By offering a normal running shoe but with a toeless forepart, this nylon mesh shoe quickly pumps out the water and dries more quickly, ready for the next submersion.

As you can appreciate, there are many ways the footwear industry has adapted to water. We mostly read about the industry's methods of repelling, resisting and water proofing footwear. But in many sports and outdoor activities there is simply too much water to resist - in such cases "when they can't fight it - they join it".

Mel Cheskin



(left) Palm Profile Kayak boot contrasts with Crewsaver's multi-use Sports boot (right).