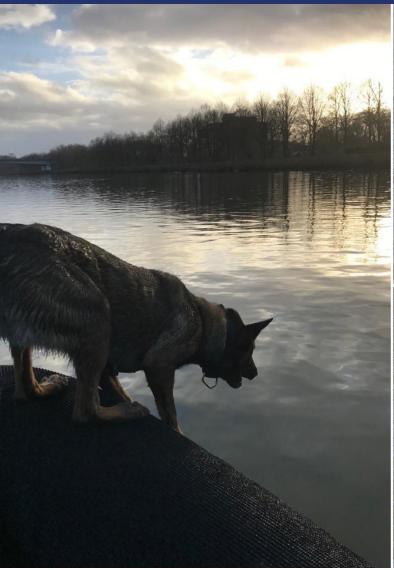




FEATURES







A few months ago, I stumbled upon a photograph in a dive magazine showing two dogs in a Rigid Hull Inflatable Boat (RIB). The picture illustrated an article about divers and the Dutch labour code. When I looked at the photo, I wondered what the Dutch Underwater Association had to do with these dogs. Do they search for missing divers on or below the water's surface? Are they looking for dead divers resting on the bottom? Do the dogs dive for lost diving equipment (would be useful)? My curiosity was triggered and I wanted an answer.

Having read the article did not solve the mystery. Even the caption of the photo, 'SIGNI search dogs are regularly called in, both by private persons and agencies, and governments to search for missing persons' did not provide any additional hints except for the missing persons. I turned to the all-knowing Google to find out what it knew about SIGNI, and I came across the link, www.zoekhonden.com. From there I made contact with Esther van Neerbos, and the mystery started to unravel.

At the beginning of our conversation, I asked Esther what exactly her organisation did. In preparation for our virtual interview I unsuccessfully tried to figure out the meaning

of the acronym by combining all kinds of words for 'dog' and 'search'. Her answer however, was simple and surprising. SIGNI comes from 'Signalisation des Voies de Navigation Intérieure', French for the 'European Code for Signs and Signals of Inland Waterways'. In the case of the group's name, it refers to the dogs' role in directing people to remains under water.

We know that dogs have a superior sense of smell, and that with appropriate training, we can use them to search for things (such as truffles, drugs, food...), animals (such as wolves, whales...) and people, alive and/or dead. There are various techniques for this, such as tracking and 'air scenting', each with its advantages and disadvantages. Air scent dogs use the presence of an undetermined human scent to locate its source.

NARROWING THE SEARCH AREA

SIGNI's dogs are usually called in when a person has (possibly) drowned in an undefined area. The exact location of the remains or the place of drowning is also uncertain. Due to the accumulation of uncertainties, the water's surface to be explored is too large to be searched by divers. The dogs can quickly survey a large area by sniffing for human scents from a boat or from the water's edge.

After all, the remains emit an odour (gas) for a very long time and that odour rises to the surface (no, not in the form of bubbles). The dogs are trained for that specific scent and indicate the place with the strongest presence. This indication first and foremost confirms the presence of a victim, and also severely restricts the area to be searched by other means. The dogs thus ensure that an extensive search area is quickly reduced to a smaller working area that is better suited to the use of precision equipment.

For the dogs, there are no restrictions regarding depth, temperature or type of water. There are also hardly any restrictions with regard to the time of drowning. Nevertheless, it is advised. unless in urgent cases, to plan the search at times with favourable circumstances in order to ensure that the search proceeds optimally. This may happen even after the official police investigation has turned nothing up.

The above read as if it were a simple procedure: dog smells gases, boat sails to the spot, and all is done. However, the scent trail is strongly influenced by wind and current. In addition, the dog cannot tell where the boat should go. The dog's behaviour must be read by the handler and passed on to the skipper.





Bringing the boat to just above the drowned person requires strong cooperation between dog, handler and skipper. Also, it is not at all certain that there is anything to be found. How long do you pilot around before you decide there's nothing in the water?

WATER SEARCH DOGS REPLACE DIVERS

During my stay in America, I had the opportunity to participate in some water training sessions for search dogs. There, divers fulfill an additional, important role in the training. The dogs are first trained to recognise the smell of human remains on land. This is done by rewarding them when they find jars of human remains during training. The difficulty of the exercise increases little by little until the handler has complete confidence in the dog's ability to find the source of the scent on a hard surface.

Then they switch to open water. With jars in hand, the divers attract the dog's attention and the skipper navigates in the direction indicated by the dog. After a few runs, the dog makes the connection between the smell, the direction he points to, and the direction of travel. A successful combination leads the boat to the diver and to the reward of the highest value for the dog. During the next steps, the diver attracts the dog's attention and dives a little when the

dog notices him. The dog then has to follow the scent to find the diver and get his reward. Gradually, the distance and depth increases until the diver can be replaced by an anchored, submerged scent jar. After the diver disappears from the scene, the training continues. We then end up in the world of the 'K9 SAR' (Search and Rescue Dog Training) techniques and that is beyond the scope of diving.

FIRST THE DOGS, THEN THE DIVERS

The training method used in America is not used by SIGNI. They train their dogs by placing scent sources in shallow water. This allows the dog to learn the transition from land to water in a simple, natural way. Then the team goes aboard. Sometimes, they use the 'learn by example' principle. Like humans, new dogs can learn by copying the behaviour of other, experienced dogs. Whatever the training method, the golden rules of dog training are repetition, planning for success, and progressing step by step.

The photo in the article referred to the collaboration between the K9 team and the divers. When a dog team in the boat confirms the presence of human remains and the work area has been determined, the dive team, which consists of volunteers, starts the search. The divers can then comb the smaller area in

search of the source of the scent. That source is not necessarily a full body. Through this cooperation, the chances of success are high. However, the Dutch Working Conditions Act makes it difficult to 'work' with diver-volunteers and that is why the picture with two dogs was an illustration for the article. Due to the efforts of the Dutch diving federation, among others, there is a favourable evolution in this dossier.

A picture still tells more than a thousand words. If you can spare some time, it's interesting to watch these working dogs and the team train, hoping you'll never need them.

VISUAL EXAMPLES

(In Dutch)

1. SIGNI search dogs helped to locate a 59-year-old missing woman from Nijmegen (the Netherlands):

https://bit.ly/vermistevrouw

- 2. SIGNI search dogs locate a missing person in a car: https://youtu.be/H-9pIIVGDQk
- 3. Can SIGNI search dogs continue to search for missing persons? https://bit.ly/3PDAYF2