



Not just another day at the office

Data Officer Anna Osypchuk joins the crew of RV “Tridens” to learn first-hand how data are collected



Anna Osypchuk.

In February 2011, Anna Osypchuk left Copenhagen for an adventure in the North Sea. As data officer in ICES Data Centre, Anna has the tricky task of ensuring the quality and the flow of fisheries-related data received from national institutes, as well as handling fisheries-data requests from many user groups such as national institutes, ICES working groups, and other interested users, both from inside and outside the ICES network. The best way for her to understand how the information is gathered and processed is to see first-hand how data are collected. For a fisheries data manager, that means jumping aboard a trawler bound for the North Sea.

After a kind invitation from the Dutch research institute IMARES, Anna joined the Dutch RV “Tridens” for a week-long cruise of the first-quarter North Sea International Bottom Trawl Survey (NS-IBTS).

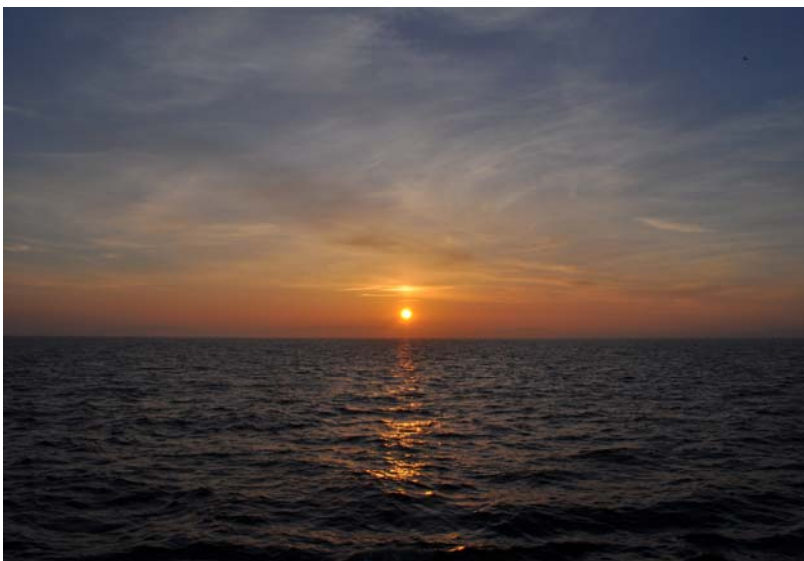
My first cruise on a research vessel was a real adventure and a great opportunity to learn how fishing surveys are carried out, how the data are collected and stored, and to meet colleagues I only knew from e-mails.

Everything was new to me, and I was slightly apprehensive as I boarded the 73-metre research vessel. As a beginner, I felt a little insecure, not knowing what this movement of the ship meant or if it was supposed to sound like that. By the end of the week, however, I

knew the ship inside out and felt perfectly safe. The accommodations were comfortable and complete. We even had an Internet connection!

In addition to the “Tridens” crew, there were six scientists from IMARES, including Henk Heessen and Ingeborg de Boois, who are active ICES members and well known in the ICES community.

Altogether, I spent four days sailing the southern North Sea. The survey could have been completed in one long journey, but it was broken up into shorter periods of activity to make it less strenuous on the personnel and less demanding of their personal lives.



Sunrise on the North Sea.



Working days were long and busy. The crew started trawling around 8:00, directly after breakfast, and continued throughout the day. Still, there was time for relaxing and getting to know your shipmates.

We were lucky that the weather was good and the sea was unusually calm, creating a good working atmosphere and allowing us to experience the beautiful North Sea sunrises that can be seen at this time of year. Of course, the North Sea isn't always so cooperative. On a cruise the week before, the rolling sea caused the ship to jump suddenly. The dinner plates shifted exactly one place over, and the crew and scientists found themselves eating their neighbour's dinner.



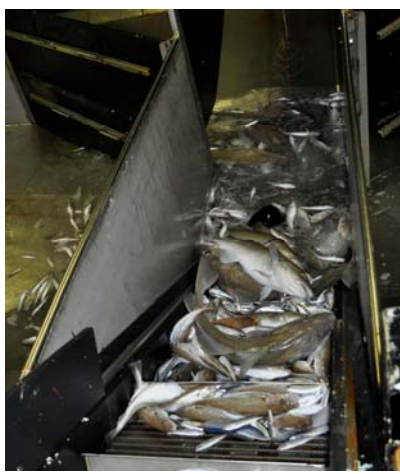
RV "Tridens" docked at Scheveningen harbour in The Hague, the Netherlands.

Each survey has a regular chain of events. First, the survey is coordinated long in advance by the ICES International Bottom Trawl Survey Working Group (IBTSWG). Then, when all of the personnel have arrived, the ship has been provisioned, and everything is ready, we sail towards the statistical rectangle where the survey is to begin. Hauls are made, and it isn't long before we are busy sorting the catch by species, and then measuring length and weight, performing dissections for sex determination, and extracting otoliths for later age-reading. Typically, there are up to four catches per day at different times and places. Catches are limited by a fishing time of approximately 30 minutes. Our largest catch was over 20 tonnes of herring, which as I understood it, is unusual for such a short fishing period.

I asked Ingeborg de Boois whether the bottom-trawl gear impacts the habitat. She explained that the trawl is usually performed on sandy seabeds, and that kind of environment is more resilient and restores itself in three to four days, quicker than areas with, for example, coral growth. In the



New catch is hauled aboard.



The catch on the sorting belt.

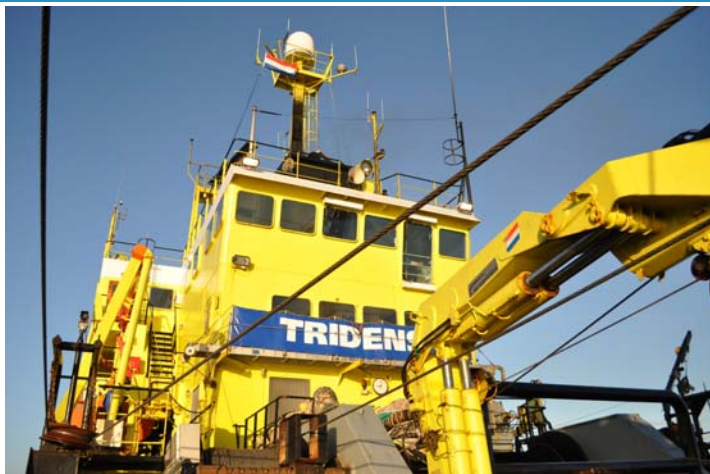


Anna sorts the catch by species.



evenings, approximately 30 minutes after sunset, part of the team performed a Methot Isaac-Kidd (MIK) midwater ring trawl, to sample fish larvae. The trawl's fine mesh allows it to snag small animals, which are not retained in larger trawl nets.

In the lab, I found it interesting to learn how to tag sharks for later release, how to distinguish various species (my ability to distinguish lemon sole, dab, plaice, and flounder grew as the week progressed), and how to extract herring and whiting otoliths for age readings.



RV "Tridens".

For some species, such as cod, taking otoliths is not as delicate a procedure as I thought. It was amusing to see Betty, a small woman from IMARES, wrestling a ten-kilo cod and cutting it up like a butcher. Whiting have quite large otoliths too, but it's harder to extract them from smaller species, such as herring and sprat.

Data entry begins as soon as sorting is finished. The measurements and other data are usually entered immediately in a dedicated computer program. The whole process goes incredibly fast because the people are professionals and really know what they are doing.

The trip was very interesting and useful for my day-to-day tasks in ICES Data Centre. My background in biology and environmental studies allows me to understand the data that I process. But because I handle data submissions from trawl surveys and communicate with data submitters about the data they are sending, it was enlightening to learn how these data are collected and to meet the data submitters in action. My experience at sea will also be useful for the planned development and hosting at ICES of an international database for fish eggs and larvae.

It was a pleasure to join the "Tridens" cruise and to observe the work of the Dutch team. Everybody – the ship's crew and IMARES staff – worked together efficiently and professionally, and were very friendly and hospitable to their landlubber guest. Actually, they encourage people to join the cruises as guests. Of course, you have to agree to their terms and be ready to participate actively, as I did. So, if you can't stand the smell of fish, it's better that you stay at home.

Would I do it again? Absolutely! Because every survey has its own design, and every ship has its own equipment that influences data-collection strategies, it would be interesting to explore how the catches are made and treated on other vessels, and to learn how the other surveys are designed. ICES data managers don't often get the chance to leave their desks, so I'm ready anytime to get out of the office and go to sea again.

More information about the history and technical background of the International Bottom Trawl Survey can be found [here](#). More information about the survey's objectives, gear, and design can be found [here](#).