

Study of northern gannets shows evidence of behavioral lateralization when plunge diving

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A team of biologists affiliated with several institutions in Britain and Ireland, has found that northern gannets exhibit a type of behavioral lateralization when plunge diving. In their study, reported in the journal

Biology Letters, the group caught and tagged several specimens with accelerometers to learn more about their diving habits.

Prior research has shown that many animals engage in behavioral lateralization, in which one side, limb or appendage is used more often when engaging in certain tasks. Humans are left or right handed, for example. Another example is cockatoos, which tend to push on their left foot when taking flight. Even whales have been found to prefer to present one side or the other during various activities. In this new effort, the research team was interested in finding out if wild [northern gannets](#) have any such preferences.

To find out, the team attached [accelerometers](#) to 71 of the [birds](#) living off the coast of Wales and Ireland, and then retrieved them three days later to gather the data. The researchers focused most specifically on their diving behavior. When gannets [dive](#) into the water, they first roll either to the left or right to improve their angle of descent, which allows them to move down through the water faster and deeper, providing a better chance of catching a fish.

The researchers note that the birds were especially active at the time of the study, as they conducted the experiment when the birds were feeding their chicks. That meant they had to hunt almost nonstop during [daylight hours](#).

The team collected data from 2,133 dives by 51 of the birds. Twenty-two of the birds preferred to roll right before diving, 23 rolled left and three had no preference. They also found that the birds appeared to prefer certain dive angles, but the researchers could not find any association between the one chosen and whether the birds rolled left or right.

The work is the first to demonstrate laterality in foraging seabirds.

More information: Ashley Bennison et al, Handedness and individual roll-angle specialism when plunge diving in the northern gannet, *Biology Letters* (2023). [DOI: 10.1098/rsbl.2023.0287](https://doi.org/10.1098/rsbl.2023.0287)

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