



The World Around Us



“Foreign Correspondent”
Michael Ludwig reports on
some interesting goings on
in the natural world.

NASA’s IceSat-2 space laser can tracks water depths from orbit

ICESat-2 (short for Ice, Cloud and land Elevation Satellite), launched by NASA on 15th September 2018, uses lasers and a very precise detection instrument to measure the elevation of Earth’s surface. By timing how long it takes laser beams to travel from the satellite to Earth and back, scientists can calculate the height of glaciers, sea ice, forests, lakes and more – including the changing ice sheets of Greenland and Antarctica.

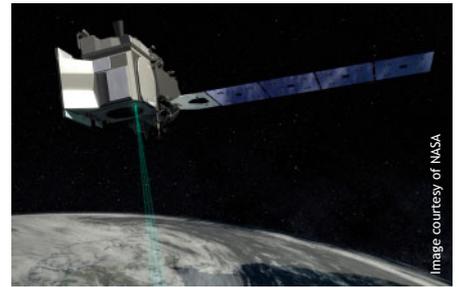


Image courtesy of NASA

ICESat-2’s ability to measure heights beyond the poles is also impressing scientists. For example, when pointed to coastal areas, in clear waters the satellite can detect the seafloor up to 100 feet (30 m) below the surface. Over forests, the satellite not only detects the top of the canopy, but the forest floor below – which will allow researchers to calculate the mass of vegetation in a given area. Other uses for the data being collected have yet to be imagined.



440 million trees by 2040

The Irish government is hoping to plant 440 million trees by 2040, as part of Ireland’s *Climate Action Plan 2019*. That would be equivalent to planting the size of 5000 Croke Park pitches each year. Forest cover in Ireland went from 80% after the last

Ice Age to 1% in the 1920s. By 2017, it had risen to 11% but this is still the second lowest percentage of forest cover in the EU. To reach the target, we need 18% forest cover by 2040. For tips on tree planting visit www.treecouncil.ie

20 years later and they are back!

Since 1991, the Irish Whale and Dolphin Group (IWDG), based in Kilrush, Co Clare, have been recording sightings of live whales, dolphins and porpoises



in the waters around the island of Ireland. Each time the identity of a particular individual is confirmed, by recording unique marks and scars on its body, it is given a unique catalogue number. The very first two Humpback Whales ever identified by them, numbers #1 and #2, was photographed in West Cork in 1999. Remarkably 20 years later, on 18th September 2019, Simon Berrow and Frances Bermingham, who were carrying out research at the time near the Blaskets, saw the same two whales together near the Blasket Islands off the coast of Kerry.

The story of your stuff winners

The Environmental Protection Agency (EPA) has selected the 2019 winners of *The Story of Your Stuff* competition, and they are from Dublin. Shurooq Azam, Aldiana Hoxha, Kar Cong Leong and Tomi Ayibiowu from Hansfield Educate Together Secondary School, Dublin 15, have won **The Story of Your Stuff 2019** competition with 'The Story of Toothbrushes'. Their story tracks the life of a toothbrush and highlights the negative impact plastics toothbrushes can have on the environment and suggest an alternative. You can view their winning video, along with the runners up, at www.thestoryofyourstuff.ie



For the competition, students were asked to submit stories about the life cycle of an everyday object with an underlying theme of recycling and sustainability. **The Story of Your Stuff** is all about thinking about where your stuff comes from and becoming more aware of the life cycle of products and the transformations they go through along the way. By becoming more aware of the ‘story of your stuff’ you begin to understand why recycling and using recyclable materials on a daily basis is so important.

Polka-dot Baby Zebra

We all know that zebras have black and white stripes. The pattern of these stripes is unique for each zebra, so no two are alike, just like human fingerprints. Recently, in Maasai Mara National Reserve in southwest Kenya, a zebra foal was born that is a bit different. This zebra is brown with white polka-dots! Given the name Tira, the surname of the Maasai guide that found it. This colouration is caused by a genetic mutation, whereby the body produce more melanin than usual. Melanin is the pigment that is responsible for dark skin, hair and fur.

