

Computer counts birds

Wind turbines affect the behaviour of birds such as guillemots and razorbills, but it is not clear how exactly. Counts of birds from the sky can help answer this question. WUR is now teaching computers to count birds using aerial photos.

At present, birds are counted manually: observers in planes count the birds they see. That is not only time-consuming but also increasingly becoming impossible.

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Wind turbines are getting taller, so the planes have to fly higher, and at such heights the human eye no longer spots much.

Aerial photos from a greater height (500 metres) are the solution. Researchers at Agro Food Robotics are now teaching computers to count the birds in these photos. The differences between the pictures in and around the wind farms show the distribution of the birds and give information about the loss of habitat due to the wind turbines. RK

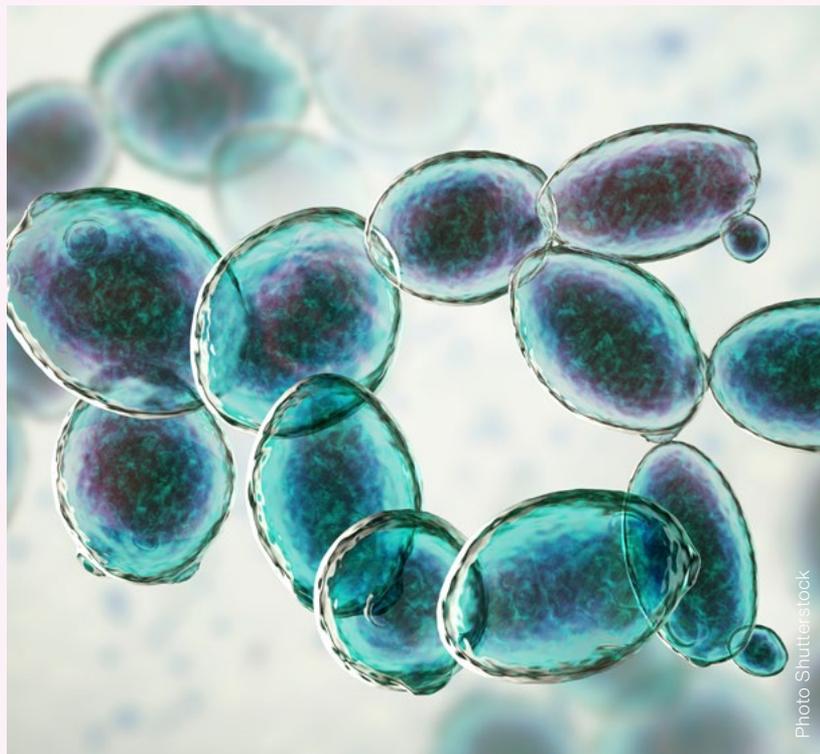


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Baker's yeast beats petroleum

Bacteria and yeasts (such as baker's yeast, see photo) can produce chemicals sustainably that we currently get from fossil fuels. But they are not yet that efficient. Ruud Weusthuis (Bioprocess Technology) got a grant from the Dutch Research Council to tweak microbes to make them produce substances like acetone more efficiently. For the maximum yield, you need to be able to control the route taken by electrons in a living cell. Weusthuis wants to insert a new electron carrier in the cell so only enzymes in the desired route can use the electrons. ss