



Press Book

Zoology: What Gives Some Animals Longer Lifespans

Tuesday, April 15th, 2014

Introduction

When looking for the secret to a long life, the answers may be found by surveying the skies, scanning the trees and peering down a few choice holes in the ground. This is according to scientists from Trinity College Dublin, who believe they know why animals spending their time in these environments live longer than is expected for other species of similar sizes.

A press release was issued to news outlets on Tuesday, April 15th, 2014. The story was also highlighted on the homepage of Trinity's website and via Trinity's Twitter account.

Print Coverage (overleaf):

- Irish Independent, Wednesday, April 16th, 2014

Broadcast Coverage (see link below):

- [Morning Edition, RTE 1, Thursday, April 17th, 2014 \(Scroll to 1:10:15\)](#)
- Newstalk, Moncrieff Show, Wednesday, April 23rd, 2014

Online Coverage (see links below):

- [India Everyday, April 15th, 2014, 10 Ways Animals Live Longer](#)
- [Irish Independent, April 16th, 2014, Why Having A Wingspan Can Help Lengthen Your Lifespan](#)
- [Discovery News, April 16th, 2014, 10 Ways Animals Live Longer](#)
- [Fox News, April 16th, 2014, 10 Ways Animals Live Longer](#)
- [Big News Network, April 16th, 2014, 10 Ways Animals Live Longer](#)
- [Technology.org, April 16th, 2014, Dying Without Wings](#)
- [Phys.org, April 16th, 2014, Study Shows Exception to Rule of Lifespan for Fliers, Burrowers and Tree Dwellers](#)



Why having a wingspan can help lengthen your lifespan

Paul Melia

Environment Correspondent
SCIENTISTS have discovered the secret to a long and happy life – the ability to fly.

Animals able to take to the skies to escape predators live longer than similarly-sized species which forage for food at ground level, researchers in Dublin have revealed.

But taking flight isn't the only key to surviving longer. Living in a burrow and sourcing most of your food in the treetops also helps.

Differences in lifespan usually relate to body size, with the small pygmy goby living for just eight weeks while the bowhead whale can live for up to 211 years.

But scientists at Trinity College Dublin wanted to know why this pattern wasn't true for everything in the animal kingdom, and new research published in the high-profile journal, 'Proceedings of the Royal Society B' now tells us why.

By looking at the maximum lifespan of more than 1,300 birds and mammals, researchers learned that species which live in trees or burrows, or possess the ability to fly, live far longer than expected for their body size.

They believe this is because these ways of living result in a lesser chance of being eaten by predators or starving

due to drought, and the "evolutionary safety net" means natural selection has pushed these species to invest more effort in living longer.

"These results help explain the unusually long life spans of many birds and bats, as such species can easily avoid predators or poor weather," lead author PhD student Kevin Healy said.

"Long-ranging seabirds, such as the albatross, provide a great example.

"Our findings also allow us to more accurately identify species with extreme lifespans, which pushes us to try to understand their secrets.

For example, while bats were thought to have unusually long

lifespans, our results show that only a small group of them actually live longer than expected once we have taken

into account the benefit they get from being able to fly. When it comes to

lifespan, most bats can really be thought of as furry birds."

Bats live 3.5 times longer than non-flying species of a similar size, whereas birds live up to four times as long.

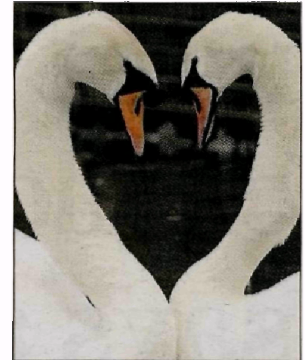
Mammals with the ability to fly can evade predators, while those in burrows have an escape route in place if they are

attacked. They include the naked mole-rat, which lives 10 times longer than expected. "We find that . . . the most important factor enabling longer lifespan is the ability to fly," the study, 'Ecology and mode-of-life explain lifespan variation in birds and mammals' says.

Among the longest-living of all animals are bats, but seabirds, parrots, flamingoes and swans also live longer than expected.

Assistant Professor in Zoology Natalie Cooper added: "Our results show that

if we want to uncover the secrets of long life, we should expand our search far beyond bats and naked mole rats."



Longer lives: Swans, bats and parrots of animal kingdom

