## TABT UPDATES AND URLS OF THE WEEK FOR MARCH 2024

#### Item 1 – Science Update

Bo Xia, et al., "On the genetic basis of tail-loss evolution in humans and apes"

(Nature, 626:8001, 28 February 2024, Pages (1042-1048) **OPEN ACCESS** 

An insertion of an Alu element into an intron of the *TBXT* gene is identified as a genetic mechanism of tail-loss evolution in humans and apes, with implications for human health today.

Tom B. Letessier, et al., "Divergent responses of pelagic and benthic fish body-size structure to remoteness and protection from humans"

(Science, 383:6686, 29 February 2024, Pages (976-982)

Fish size structure is more affected by human pressure in midwater than in seabed ecosystems.

#### Item 2 – Quote of the Week for 5 March 2024

"Anything that's human is mentionable, and anything that is mentionable can be more manageable." – Fred Rogers, American television host

## Item 3 – URL of the Week for 5 March 2024

**Class Tech Tips** 

This blog provides you with a wide selection of useful education-related information, ranging from Math tools, Social Studies and Sciences, reading, writing, educational technology, and new teaching strategies. https://classtechtips.com/

## Item 4 - Thanks To Our Sponsors

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#### Item 1 – Science Update

Anton Potapov, *et al.*, "Rainforest transformation reallocates energy from green to brown food webs" (Nature, 627:8002, 7 March 2024, Pages (116-122) OPEN ACCESS

Conversion of rainforest to plantations in Sumatra leads to higher energetic losses in animal food webs aboveground than belowground, with the belowground energy being reallocated from diverse arthropod communities to invasive earthworms.

Brittany Finucci, et al., "Fishing for oil and meat drives irreversible defaunation of deepwater sharks and rays"

(Science, 383:6687, 8 March 2024, Pages (1135-1141)

The international fish liver oil and meat trade is driving rapid depletion of deepwater sharks with extremely slow life histories.

#### Item 2 – Quote of the Week for 11 March 2024

"You can't study the darkness by flooding it with light." - Edward Abbey, American author and essayist

#### Item 3 – URL of the Week for 11 March 2024

**Texas State Parks – Eclipse Information** 

State Parks <u>Day Pass Reservations</u> for the April 8 eclipse are now open. For tips on making your reservation, read our press release.

Texas has 31 state parks within the path of totality, and a partial eclipse will be visible in other state parks. Parks in the line of totality are expected to reach capacity, and *members of the public are asked not to visit unless they have a pre-purchased day pass or overnight reservation.* 

Additional information on this exciting event can be found on TPWD's <u>eclipse viewing website</u> and the <u>eclipse</u> viewing FAQ website.

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#### Item 1 – Science Update

Alice D. Bridges, et al., "Bumblebees socially learn behaviour too complex to innovate alone" (Nature, 627:8004, 21 March 2024, Pages (572-578) OPEN ACCESS

Bumblebees can learn how to open a two-step puzzle box by observing another trained bee, indicating that these insects can use social learning to acquire a behavior too complex to otherwise be learnt through individual trial and error.

Ashley Larsen, et al., "Spillover effects of organic agriculture on pesticide use on nearby fields" (Science, 383:6689, 22 March 2024, Pages (OL) OPEN ACCESS

Nearby organic cropland reduces pesticide use on organic fields but increases pesticide use on conventional fields.

#### Item 2 – Quote of the Week for 25 March 2024

"In a society where women often feel pressured to tear one another down, our saving grace lies in our willingness to lift one another up." – *Madeleine Albright, American diplomat* 

# Item 3 – URL of the Week for 25 March 2024 FinVision

This project asks volunteers to count and identify fish in underwater videos and images collected throughout coastal nursery areas on the south coast of the UK. The project focuses on capturing footage of the very smallest fish, to understand what habitats they require before they reach adulthood. The videos and images are collected from a new juvenile habitat monitoring camera (or the JHaM-Cam for short!) which uses state of the art stereo-camera systems Your contributions to the FinVision project will allow the team to analyze critical data that will help to conserve natural fish nursery areas around the UK coastline.

https://www.zooniverse.org/projects/ryanhepburn/finvision

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