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Domestication of Chickens

Researchers have found that an association with dry rice farming likely started a domestication process, which has led to chickens becoming one of the world's most numerous domesticated animals.

- Previous efforts claimed that
    1. Chickens were domesticated up to 10,000 years ago in China, Southeast Asia, or India, and
    2. Chickens were present in Europe over 7,000 years ago.
- The new studies show these claims are wrong.
- It says that the driving force behind chicken domestication was the arrival of **dry rice farming** into **south-east Asia** where their wild ancestor, the arboreal **red jungle fowl** (*Gallus gallus spaedicus)* lived.

  The red jungle fowl is a tropical bird in the pheasant family. Charles Darwin first proposed that chickens may have descended from the red jungle fowl because of their similar appearances.

- Dry rice farming acted as a magnet drawing wild jungle fowl down from the trees and thereby kick-starting domestication of the jungle fowl.
- This domestication process was underway by around **1,500 BC** (Bronze Age) in the **Southeast Asia peninsula**.
- The research suggests that chickens were then transported first across Asia and then throughout the Mediterranean Europe along routes used by early Greek, Etruscan and Phoenician maritime traders.
- Another study found that the domesticated fowl arrived in Mediterranean Europe around 2,800 years ago and then appeared in Africa 1,100 and 800 years ago.
- **Reason -** Archeologists have found people being buried with chickens, rather than discarded as scraps, making a domestic relationship clear.
- Because the birds were buried with humans, it suggested that they had a cultural or social significance and were sacred creatures instead of a food source.
- This means that a **desire for meat did not drive the domestication** of the chicken.

The oldest bones of a definite domestic chicken were found at Neolithic Ban Non Wat in central Thailand, and date to between 1,650 and 1,250 BC.

Reference

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Darjeeling Himalayan Railway

The Darjeeling Himalayan Railway has recorded its highest ever monthly revenue generation.

- The Darjeeling Himalayan Railway (DHR) or the **Toy Train** is a 141-year-old **mountain railway system** that started operating in 1881.
- Located in the foothills of the Himalayas, it is a 2-ft gauge railway that runs in **West Bengal**.
- This railway system comes under the Guwahati-headquartered **Northeast Frontier Railway** (NFR).
- The NFR currently operates a daily service between **New Jalpaiguri and Darjeeling** and 12 joyride services between **Darjeeling and Ghum** (India's highest railway station).
- The DHR also introduced special services such as Steam Jungle Tea Safari, Red Panda and Him Kanya.
- The DHR is a **UNESCO World Heritage Site** since 1999.

Mountain Railways Declared as UNESCO World Heritage Sites	
Darjeeling Himalayan Railway	West Bengal (1999)
Nilgiri Mountain Railways	Nilgiri Hills of Tamil Nadu (2005)
Kalka Shimla Railway	Himalayan foothills of Himachal Pradesh (2008)

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3. https://darjeeling.gov.in/tourist-place/joy-ride-in-darjeeling-himalayan-railway-popularly-known-as-toy-train-from-darjeeling-to-darjeeling-via-batasia-loop-ghoom/

Zmiinyi Island

Ukraine has caused "significant losses" to the Russian military in airstrikes on the Zmiinyi Island in the Black Sea.

- Located in the **Black Sea**, the Zmiinyi Island is also known as the Snake Island or the Serpent Island.
- It is a small piece of rock less than 700 metres from end to end.
- It belongs to Ukraine.
- The island has been known since ancient times and is marked on the map by the **village of Bile** that is located on it.
- Snake Island lies close to the mouth of the **River Danube**, which delineates Romania's border with Ukraine.
- It is also roughly to the southwest of the **port city of Odessa**.

The Black Sea

- The Black Sea is an **inland sea** situated at the south-eastern extremity of Europe.

- It is bound by Ukraine to the north and northwest, Russia to the north east, Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west.
- It is **connected to the Atlantic Ocean** by the Bosporus, the Sea of Marmara, the Dardanelles, the Aegean Sea, and the Mediterranean Sea.
- The **Crimean Peninsula** thrusts into the Black Sea from the north, and just to its east the **Kerch Strait** links the sea to the smaller Sea of Azov.
- **Features** - The Black Sea is a remarkable feature because its lower levels are almost biologically dead—not because of pollution but because of continued weak ventilation of the deep layers.
- It has traditionally been Russia's warm water gateway to Europe.
- **History -** The ancient Greeks named the sea - then on the fringe of the Mediterranean world - as the **Pontus Axeinus** (Inhospitable Sea).
- As later explorations revealed that the shores of the sea are more hospitable and friendly, the Greeks changed its name to **Pontus Euxinus**, the opposite of the earlier designation.
- In the past, the Turks called it the **Karadenız**, as they only saw the inhospitable aspect of the Black Sea.
- **Related Links -** Aegean Sea, Montreux Convention

Reference

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Pragati Maidan Integrated Transit Corridor Project

The Prime Minister dedicated to the nation the main tunnel and 6 underpasses of Pragati Maidan Integrated Transit Corridor Project.

- The Pragati Maidan Integrated Transit Corridor project is a part of the ITPO-Pragati Maidan Redevelopment Project.
- Started in 2017, the project has been entirely funded by the Central Government.
- But, it was executed by the Delhi government's Public Works Department (PWD).
- The key aims of this project are,
    1. To de-congest traffic around the Pragati Maidan Trade Centre and
    2. To remove bottlenecks on Bhairon Marg, Ring Road, ITO-W point and Mathura Road and make it signal free.
- The main Tunnel connects Ring Road with India Gate via Purana Qila Road passing through Pragati Maidan.
- It will serve as an alternative route to Bhairon Marg.
- Along with the tunnel, there will be 6 underpasses - 4 on Mathura Road, one on Bhairon Marg and one on the intersection of Ring Road and Bhairon Marg.

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New Advisory on Type-1 Diabetes

The Indian Council of Medical Research (ICMR) has published the country's first-ever list of basic dos and don'ts to ensure the safety of Type-1 patients during travel.

As per the International Diabetes Federation, India has the highest number of incident and prevalent cases of Type-1 diabetes in the world.

- The ICMR guideline document provides advice on care of diabetes in **children, adolescents and adults** with Type-1 diabetes.
- This document states that individuals with Type-1 diabetes need support
    1. To survive, using insulin and other therapies, and
    2. To live their entire life without stigma, restrictions, or disabling complications due to their illness.
- The ICMR's pre-travel advice for children and adolescents living with Type-1 diabetes includes,
    1. Never wearing brand new shoes for a trip, instead carry comfortable shoes to avoid straining the feet while on travel,
    2. Alternating between two pairs of shoes to decrease the risk of blisters and calluses,
    3. Travelling with flash cards to navigate language barrier,
    4. Storage of insulin and how to minimise glucose fluctuation.
- The patients should inform the physician in advance, preferably 4 to 6 weeks before the planned travel.
- They should have medications and blood testing materials for the whole trip plus reserve supplies for at least 2 to 4 weeks if unforeseen circumstances extend the travel.
- Patients with a **medical identification bracelet** should have information on the disease, use of insulin, and disclose any allergies.

Type-I Diabetes

- Type-I diabetes is a chronic condition in which the pancreas **produces little or no insulin**.
- It is once known as juvenile diabetes or insulin-dependent diabetes.

Insulin is a hormone needed to allow sugar (glucose) to enter cells to produce energy.

- Although type 1 diabetes **usually appears during childhood or adolescence**, it can develop in adults.
- **Causes** - The type 1 diabetes is thought to be caused by an autoimmune reaction (the body attacks itself by mistake).
- Usually, the body's own immune system mistakenly destroys the insulin-producing (islet, or islets of Langerhans) cells in the pancreas.
- Different factors may contribute to type-1 diabetes. These include,
    1. Genetics,
    2. Exposure to viruses and

3. Exposure to other environmental factors.

Diet and lifestyle habits don’t cause type 1 diabetes.

- **Symptoms** include increased thirst, frequent urination, extreme hunger, unintended weight loss, fatigue, bed-wetting in children who previously didn't wet the bed during the night, and blurred vision.
- Despite active research, type 1 diabetes has **no cure**. Treatment focuses on managing blood sugar levels with insulin, diet and lifestyle to prevent complications.

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