

Prelim Bits 11-09-2019

Cryodrakon Boreas (Cold dragon of the North Winds)

• Paleontologists have identified a new species, named it 'Cryodrakon boreas' - a giant flying reptile.



- With a wingspan of over 10 metres, it is believed to have flown over the heads of dinosaurs.
- It could be one of the largest flying animals lived over 77 million years ago in today's western Canada.
- Its remains were, discovered 30 years ago from the Dinosaur Park Formation located in Alberta.
- A new study has concluded that the remains belong to a new species, which is the first pterosaur to be discovered in Canada.
- In terms of habitat and lifestyle, it would have lived in a tropical environment, feasting on small dinosaurs and lizards.

UN Human Rights Body (UNHRC)

- The United Nations High Comissioner for Human Rights has expressed concern over Assam NRC and communications blackout, detention of political leaders in Jammu and Kashmir.
- \bullet In the $42^{\mbox{\tiny nd}}$ session of the United Nations Human Rights Council in Geneva.
- UNHRC is an inter-governmental body within the United Nations system

responsible for,

- 1. Strengthening the promotion and protection of human rights around the globe and
- 2. For addressing situations of human rights violations and make recommendations on them.
- It has the ability to discuss all thematic human rights issues and situations that require its attention throughout the year.
- The Human Rights Council replaced the former United Nations Commission on Human Rights (UNCHR).
- The Council was created by United Nations General Assembly (UNGA) 'Resolution 60/251'.
- The Council holds no fewer than 3 regular sessions a year, for a total of at least 10 weeks.
- The meetings take place for,
 - 1. 4 weeks in in March,
 - 2. 3 weeks in June, and
 - 3. 3 weeks in September.
 - 4. The sessions are held at the UN Office in Geneva, Switzerland.
- The Council is made up of **47** UN Member States, which are elected by the **UNGA** through a direct and secret ballot.
- Seats on the Council are distributed as follows,
 - 1. African States: 13 seats
 - 2. Asia-Pacific States: 13 seats
 - 3. Latin American and Caribbean States: 8 seats
 - 4. Western European and other States: 7 seats
 - 5. Eastern European States: 6 seats
- Members of the Council serve for a period of 3 years.
- They are not eligible for immediate re-election after serving 2 consecutive terms.
- The HRC has a Bureau of 1 President and 4 Vice-Presidents, representing the 5 regional groups.
- They serve for a year, in accordance with the Council's annual cycle.

Bombay Blood Group

- Recently, the 'Bombay blood group', a rare blood type, has been at the centre of attention in Mumbai's healthcare scene.
- Demand for the blood type has coincidentally spiked at hospitals, but supply has been scarce.

- The 4 most common blood groups are **A**, **B**, **AB** and **O**.
- The rare, 'Bombay blood group' was first discovered in Mumbai in 1952 by Dr Y M Bhende.
- Each red blood cell has antigen over its surface, which helps determine which group it belongs to.
- The Bombay blood group, also called "**hh**", is deficient in expressing antigen H, meaning the RBC has no antigen H.
- For instance, in the **AB** blood group, both antigens A and B are found.
 - 1. **A** will have A antigens, **B** will have B antigens.
 - 2. In **hh**, there are no A or B antigens.
- Globally, the **hh** blood type has an incidence of 1 in 4 million.
- It has a higher incidence in South Asia, in India, 1 in 7,600 to 10,000 are born with this type.
- This blood type is more common in South Asia than anywhere else because of inbreeding and close community marriages.
- It is genetically passed and shared common ancestry among Indians, Sri Lankans, Pakistanis and Bangladeshis.
- This led to more cases of **hh** blood phenotype in this region.
- Often the **hh** blood group is confused with the **O** group.
- The difference is that the **O** group has **Antigen H**, while the **hh** group does not.
- The individuals with 'Bombay blood group' (**hh**) can only get blood from individuals of Bombay hh phenotype.
- ullet In contrast, hh blood group can donate their blood to A,B,O blood types.

Zero-budget Farming

- Addressing the **COP14** to the **UNCCD**, PM mentioned that India is focusing on Zero Budget Natural Farming (**ZBNF**).
- **ZBNF** is a farming technique that seeks to bring down input costs for farmers,
 - 1. by encouraging them to rely upon "Natural products"
 - 2. rather than spending money on pesticides and fertilisers.
- \bullet The concept behind ZBNF is that over $\bf 98\%$ of the nutrients required by crops for photosynthesis,
 - 1. Carbon dioxide, Nitrogen, Water and solar energy are already available free from the air, rain, and Sun.
 - 2. Only the remaining 1.5% to 2% nutrients need to be taken from the soil, and

- 3. Convert from "non-available" to "available" form through the action of 'Microorganisms'.
- To help the microorganisms act, farmers must apply,
 - 1. 'Jiwamrita' (microbial culture)
 - 2. 'Bijamrita' (seed treatment solution),
 - 3. 'Mulching' (covering plants with a layer of dried straw or fallen leaves) and
 - 4. 'Waaphasa' (giving water outside the plant's canopy)
 - 5. to maintain the right balance of soil temperature, moisture, and air.
- To manage insects and pests, **ZBNF** recommends the use of 'Agniastra', 'Brahmastra' and 'Neemastra'.
 - 1. These are based mainly on urine and dung of cow breeds.
 - 2. These too, need not be purchased, so farming remains practically "Zero-budget".
- However, Scientists claims that there is no authenticated results from any experiment for it to be considered a feasible technological option.
- ICAR, India's national network of agricultural research and education institutes, has appointed a committee under 'Praveen Rao Velchala', to study the viability of **ZBNF**.

Source: PIB, The Indian Express

