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Ramon Magsaysay Award 2024

Japanese filmmaker Hayao Miyazaki has won the 2024 Ramon Magsaysay Award.

- **Ramon Magsaysay Award** – It is Asia's premier prize and highest honor that recognizes greatness of spirit shown in selfless service to the peoples of Asia regardless of race, gender, or religion.
- It is awarded to outstanding ***individuals and organizations*** whose selfless service has offered solutions to some of the most intractable problems of human development.
- It is also known as the "Nobel Prize of Asia."
- **Ramon Magsaysay** – 7th Philippine President whose ideals inspired the Award's creation.
- **Award Instituted In** – 1957.
- **Announcement** - Recipients of the Award are announced annually on ***August 31st***.
- **Award Presentation** - The Award medallion and certificate are presented in a formal ceremony ***in Manila, Philippines, every November*** of the same year.
- **Categories** - Award was given in six categories annually.

Government Service	To recognize outstanding service in the public interest in any branch of government, including the executive, judicial, legislative, or military.
Public Service	To recognize outstanding service for the public good by a private citizen.
Community Leadership	To recognize leadership of a community toward helping the disadvantaged have fuller opportunities and a better life.
Journalism, Literature, and Creative Communication Arts	To recognize effective writing, publishing, or photography or the use of radio, television, cinema, or the performing arts as a power for the public good.
Peace and International Understanding	To recognize effective writing, publishing, or photography or the use of radio, television, cinema, or the performing arts as a power for the public good.
Emergent Leadership	To recognize an individual, forty years of age or younger, for outstanding work on issues of social change in his or her community.
Hayao Miyazaki	

> • Hayao Miyazaki is the Japanese filmmaker, considered one of the greatest animators and directors.
> • **His Major Works** - My Neighbour Totoro, Kiki's Delivery Service, World Masterpiece Theater, Future Boy Conan, *The Wonderful World of Puss 'n Boots, Castle in the Sky, Spirited Away*
> • **Books written** - *Starting Point: 1979 to 1996*
> • **Studio Ghibli** - He along with director Isao Takahata and producer Toshio Suzuki, founded Studio Ghibli in 1985.
> • **Themes** - Pacifism, Environmentalism.
> • Miyazaki's work was heavily steeped in the changing lives of Japanese people post-World War II.

Reference
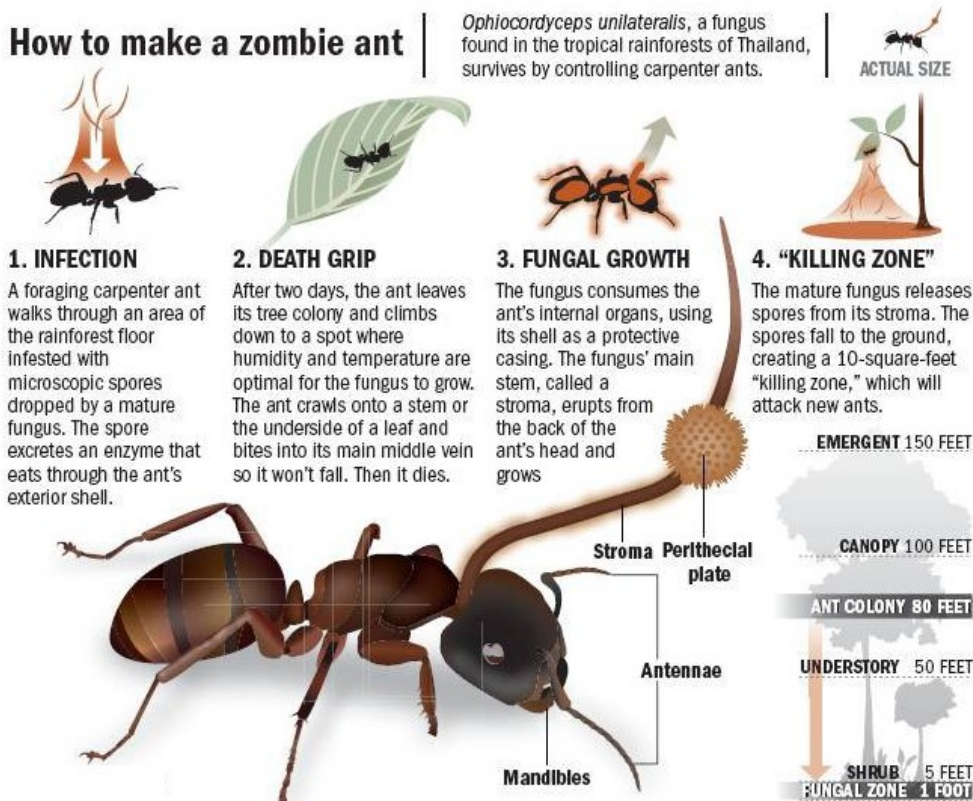
[Indian Express | Magsaysay Award](#)

Zombie fungus

Recently, A field researcher found a dead tarantula that was infected by zombie fungus.

- **Zombie Fungus** – It is a species of parasitic fungus that generally infects ants and alters their behaviour before killing them.
- It is the first time it has infected a tarantula.
- It does not infect humans.
- **Scientific name** - Ophiocordyceps unilateralis.
- It is referred to simply as "cordyceps".
- **Taxonomy**
    - **Kingdom**: Fungi
    - **Order**: Hypocreales
    - **Family**: Ophiocordycipitaceae
    - **Domain**: Eukaryota

- **Prevalence** – They currently found predominantly in ***tropical forest ecosystems.***
- **Lifecycle** - The fungus begins its life cycle as a sticky spore on the forest floor.
- **Infection** - The Spore attaches to the body of a passing carpenter ant and germinates infective hyphae (threadlike strands) to breach the insect's exoskeleton.
- **Growth** - Once successfully inside the ant body, the fungus grows and manipulates the ant's behaviour.
- It makes the ant position itself in a warm, humid location near the ground that will best serve to distribute a new crop of fungal spores.
- **Death** - After the ant dies, the fungus finishes digesting the cadaver from the inside out and erects a triumphant stalk from the base of its conquest's head.
- **Spread** - The stalk releases spores from characteristic lateral cushions, and the cycle continues.

How to make a zombie ant | *Ophiocordyceps unilateralis*, a fungus found in the tropical rainforests of Thailand, survives by controlling carpenter ants. | ACTUAL SIZE

1. INFECTION
A foraging carpenter ant walks through an area of the rainforest floor infested with microscopic spores dropped by a mature fungus. The spore excretes an enzyme that eats through the ant's exterior shell.

2. DEATH GRIP
After two days, the ant leaves its tree colony and climbs down to a spot where humidity and temperature are optimal for the fungus to grow. The ant crawls onto a stem or the underside of a leaf and bites into its main middle vein so it won't fall. Then it dies.

3. FUNGAL GROWTH
The fungus consumes the ant's internal organs, using its shell as a protective casing. The fungus' main stem, called a stroma, erupts from the back of the ant's head and grows

4. "KILLING ZONE"
The mature fungus releases spores from its stroma. The spores fall to the ground, creating a 10-square-feet "killing zone," which will attack new ants.

Stroma Perithecial plate

Antennae

Mandibles

EMERGENT 150 FEET

CANOPY 100 FEET

ANT COLONY 80 FEET

UNDERSTORY 50 FEET

SHRUB 5 FEET
FUNGAL ZONE 1 FOOT

References

1. [CNN | Tarantula infected by 'zombie fungus'](#)
2. [Brittanica | Zombie Ant Fungus](#)

Arabian wolf & Indian wolf

Recently about 9 deaths in the riverine plains of Bachrach, Uttarpradesh is suspected to be caused by Indian Wolves.

- **Wolf (Canis lupus)** – It is a wide ranging and highly adaptive species.
- **Habitats** - With almost 40 subspecies, the wolf lives in a wide variety of habitats

- High mountains like the Himalayas
- Plains like the Indo-Gangetic Plain of South Asia
- The Deccan Plateau
- The icy tundra of the Arctic
- Deserts like the Thar
- The taiga.

- **Southern Wolves** – Indian and Arabian Wolves are southern subspecies of grey wolf species.
- They inhabit mostly arid landscapes.
- The Arabian wolf is the smallest grey wolf in the world and is Endangered due to human persecution.

Characteristics	Indian Wolf	Arbian Wolf
Scientific Name	Canis lupus pallipes	Canis lupus arabs
IUCN Status	Endangered	Endangered
CITES	Appendix I	Appendix II
WPA Status	Schedule I	Not Available
Size	Medium in size	Smallest
Distribution	India, Pakistan, Afghanistan, Nepal, Bhutan, Israel, Turkey, Iran, and Syria	Arabian Peninsula, the Negev Desert, the Sinai Peninsula, and Jordan
Habitat	Open grasslands, thorn forests, and scrublands	Desert-adapted subspecies
Hunting	Indian wolves are territorial and hunt during the night	Nocturnal and Hunt during Night

References

[DownToEarth | Indian wolf brings hope for its Arabian cousin](#)

Lothal dockyard of Harappan Civilisation

Recently a new study by the Indian Institute of Technology-Gandhinagar has found evidence for Lothal dockyard of Harappan Civilization.

- **Lothal** – It is situated approximately 30 km inland from the Gulf of Khambhat on the western coast of India in Gujarat.
- It served as a bustling port during the Bronze Age Harappan period (2600 BCE to 1900 BCE)
- It was connected to a series of Harappan production and distribution centres along the Gulf of Kachchh and the Rann of Kachchh.
- **Significance** - Lothal is renowned for its well-preserved ***brick-walled dockyard and warehouse***.
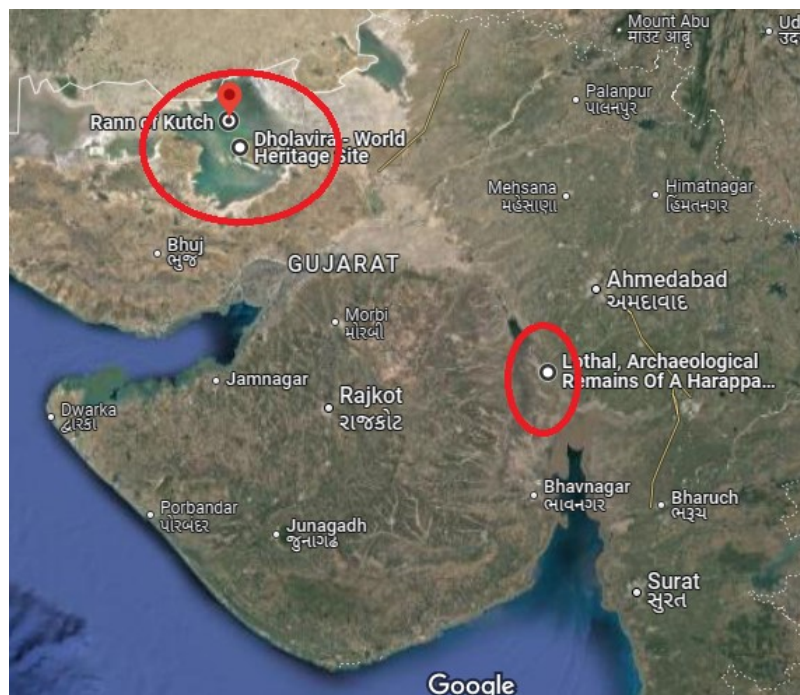

- **Study findings** - The Lothal dockyard theory is reevaluated using multi-sensor data, cloud computing, and multiple platforms.
- **Path of Sabarmati River** - Sabarmati river used to flow by Lothal during the Harappan Civilisation.

- Currently, it flows 20 km east of Lothal.
- The lower reaches of the River Sabarmati underwent significant migration during the late Holocene period.
- It was discovered by the satellite images of the old channels of the River Sabarmati.
- **Travel Route** - There was also a travel route connecting Ahmedabad, through Lothal, the Nal Sarovar wetland, and the Little Rann, to Dholavira.

References

1. [Indian Express | Lothal Dockyard](#)
2. [ScienceDirect | Sabarmati and its connection with Lotha](#)l

Indian Ocean Biodiversity Ocean Information System (IndOBIS)

Recently Centre for Marine Living Resources and Ecology (CMLRE) organised a national-level workshop on IndOBIS.

- **IndOBIS** – It is the Indian regional node of the global Ocean Biodiversity Information System (OBIS).
- **Developed by** - Centre for Marine Living Resources and Ecology (CMLRE)

CMLRE is a premier research institution under the Ministry of Earth Sciences, established in 1998 at Kochi.

- **Function** - IndOBIS collects data of taxonomically resolved marine species occurrence records from the Indian Ocean.
- It accepts several categories of marine biodiversity data types, including literature and occurrence, abundance records, DNA-derived or genomic profiles, etc.
- **Use of IndOBIS** - It can be used in innovative studies such as tracking species distribution, identifying biodiversity hotspots, and accessing climate change impacts.

Ocean Biodiversity Information System (OBIS)
• OBIS is one of the largest global repositories of information on marine species, marine science, conservation, and education. • It emanated from the Census of Marine Life (2000-2010). • **Established by** - Intergovernmental Oceanographic Commission (IOC) of UNESCO. • It is now an integral component of the International Oceanographic Data and Information Exchange (IODE) of IOC. • **Features** - It is supported by a network of nearly 30 regional nodes contributing data. • It contains millions of records from thousands of datasets contributed by researchers, governments, and organisations worldwide. • It provides detailed information on ***species distribution across the world's oceans***, including data on their occurrence, habitats, and environmental parameters. • It provides free and open access to, and application of, biodiversity and biogeographic data and information on marine life. • It offers tools and services that allow users to search, visualise, and download biodiversity data.
Ocean Eyes
• It is a citizen-centric mobile app for community-engagement approach to data collection, sharing, and analysis in marine biodiversity monitoring and research. • **Developed by** - Centre for Marine Living Resources and Ecology • Citizens and users can record sightings of marine species, log environmental conditions, and upload geotagged photos directly through the mobile.

References

1. [PIB | Indian Ocean Biodiversity Information System](#)
2. [IndOBIS | Indian Ocean Biodiversity Information System](#)