FOSSIL FOREVER CLUB

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FOUNDER'S TALK

Dear Readers,

I am Aswatha Biju, a young palaeontologist from India. My journey in the field of palaeontology began at the age of 10. Over the years, I witnessed a growing curiosity and enthusiasm among students towards exploring this fascinating discipline. Motivated by this emerging interest, I conceptualized the idea of forming a dedicated platform for like-minded students. At the age of 14, I envisioned establishing a club that would bring together students who genuinely think, contribute, and commit themselves to the advancement of palaeontology. Thus, the "Fossil Forever Club" was founded with a selective admission process designed to identify truly passionate individuals. Now, at 16 years old, I am proud to have assembled a team of 20 committed students who are being trained both professionally and ethically in various aspects of palaeontology.

The foundation for the club was laid on May 21, 2023, following a summer workshop organized in celebration of Mary Anning's birth anniversary.

This event revealed a strong need for structured guidance among the participating students. Consequently, on June 5, the "Fossil Forever Club" was officially launched, with students being assigned regular tasks to foster discipline, knowledge, and skill.

As one of our early initiatives, we collectively organized the Fossil Carnival Day on October 14, a celebration of prehistoric life and scientific curiosity. Followed by educational field visits to Ariyalur fossil beds and Gunduperumbedu fossil shale beds and talent exchange workshops consecutively.

Warm regards,

Aswatha Biju

Founder, Fossil Forever Club

GREETING NOTE

பெரியார் பல்கலைக்கழகம்
பெரியார் பல்கலை நகர், சேலம்-636 011, தமிழ்நாடு, இந்தியா.
PERIYAR UNIVERSITY
Periyar Palkalai Nagar, Salem-636 011, Tamilnadu, India.
அறிவால் விளையும் உலகு Wisdom Maketh World

Dr.Mu.RAMKUMAR
Professor of Geology
Alexander von Humboldt Fellow

This is a developing story of a chance meeting with a 10 year old little gal at the Department of Marine Sciences, Bharathidasan University. From a toddler in fossil collection, but in fact who had a collection of Modern sea shells, considering them as fossil, the little gal Aswatha Biju, has grown to the stature of being awarded Young Paleontologist by the Prime Minister of India, for her work on dissemination of knowledge and conservation of fossils and paleobiological geoheritage sites, and continue to grow above the shoulders of her mentors and charting her own way, a truly remarkable story it is, indeed!

I first met Aswatha when she was just a 10-year-old girl at Bharathidasan University, Trichy. Even at such a young age, her keen curiosity about fossils left a lasting impression on me. I was genuinely amazed to witness such pure and self-driven interest in a child so young. Her passion and eagerness to learn led us into an engaging 3–4-hour-long conversation filled with questions, discussions, and clarifications. I made sure to guide her through the fundamental concepts of fossils and the broader field of palaeontology.

By the end of our interaction, I gifted her, a hand-drawn map marking various fossil sites around the Tiruchirappalli-Ariyalur-Perambalur districts, along with illustrated representations of the fossils typically found there. As a challenge, I tasked her with collecting orbitoid fossils from Ariyalur in exchange for a Bourneville Amber specimen.

To my surprise and delight, she returned two years later, to meet me in the Sedimentology Laboratory, Department of Geology, Periyar University. She was then in Grade 7, and met me only after having successfully collected the orbitoid fossils after 11 determined attempts. As promised, I rewarded her with the Bourneville Amber and a sample of volcanic ash to further encourage her pursuit.

Over time, she has evolved into a remarkable young advocate for palaeontology, actively educating students and enthusiasts across the globe—impacting more than 20,000 minds so far. Her latest initiative, the Fossil Forever Club, is a commendable platform that lays a strong foundation for aspiring paleontologists. This quarterly magazine, born from her unwavering dedication, is bound to inspire many more young minds.

I extend my heartfelt wishes for her continued success and offer my sincere congratulations on the release of this remarkable publication.

M.RAMKUMAR

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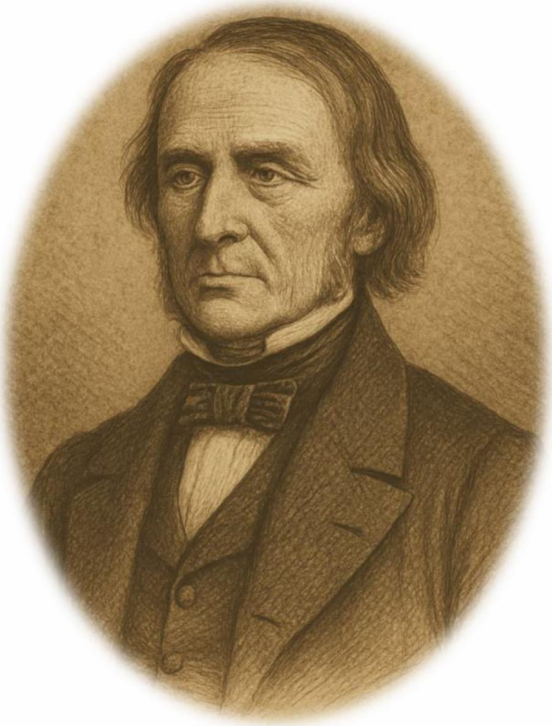
Georges Cuvier (1769- 1832)

Georges Cuvier is called the Father of Palaeontology. He was expert of Zoology and Animal anatomy. He had a special ability. By looking at fossil bones, he could imagine and draw how prehistoric creature looked like. He began the study of Palaeontology.

Mary Anning (1799- 1847)

Mary Anning is called the Princess of Palaeontology. She learned about fossils from her father. She used to hunt for fossils with her brother Joseph and her dog Tray. She discovered first Ichthyosaurs, first complete Plesiosaur skeleton and pterosaur named Dimorphodon. Famous tongue twister " She sells sea shells on the sea shore" is based on her story.

Sir Richard Owen (1804- 1892)



Sir Richard Owen was the first person to use the Greek word 'Dinosauria' for extinct reptiles. It means 'terrible reptile' or 'fearfully great reptile'. He also helped in the creation of British Natural History Museum in London.

- Eva Abraham

THE TINY TRAILBLAZER

PIKAI'S SECRET IS DECODED

Written by R.Sanjeetha

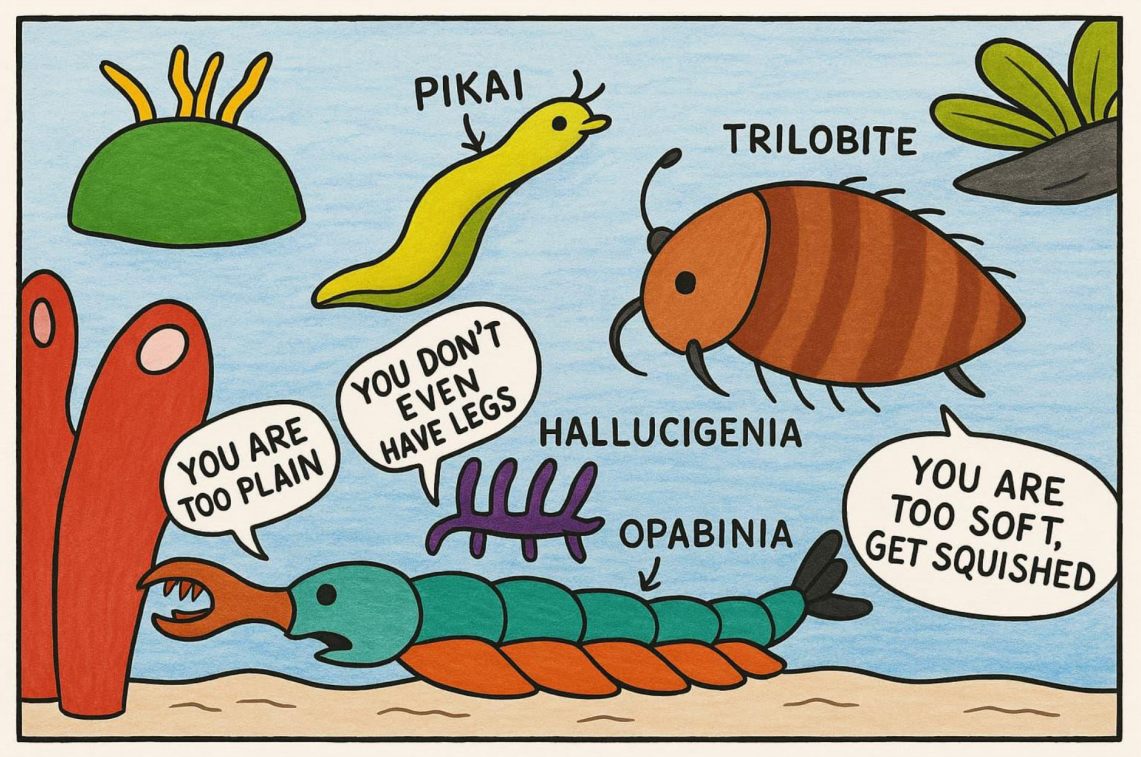
Over 500 million years ago, during the Cambrian period, the ocean sparkled with full of strange animals. Big jellyfish floated, creepy bugs crawled on the sea floor and spiky creatures waved their legs. But in the middle of them all was a tiny, soft animal named Pikaia. Pikaia was small and wiggly like a little ribbon with a tail. It didn't have sharp teeth and hard armour. The other sea animals laughed at her.

"You're too soft. You'll get squished." said the Trilobite.

"You don't even have legs." giggled Hallucigenia.

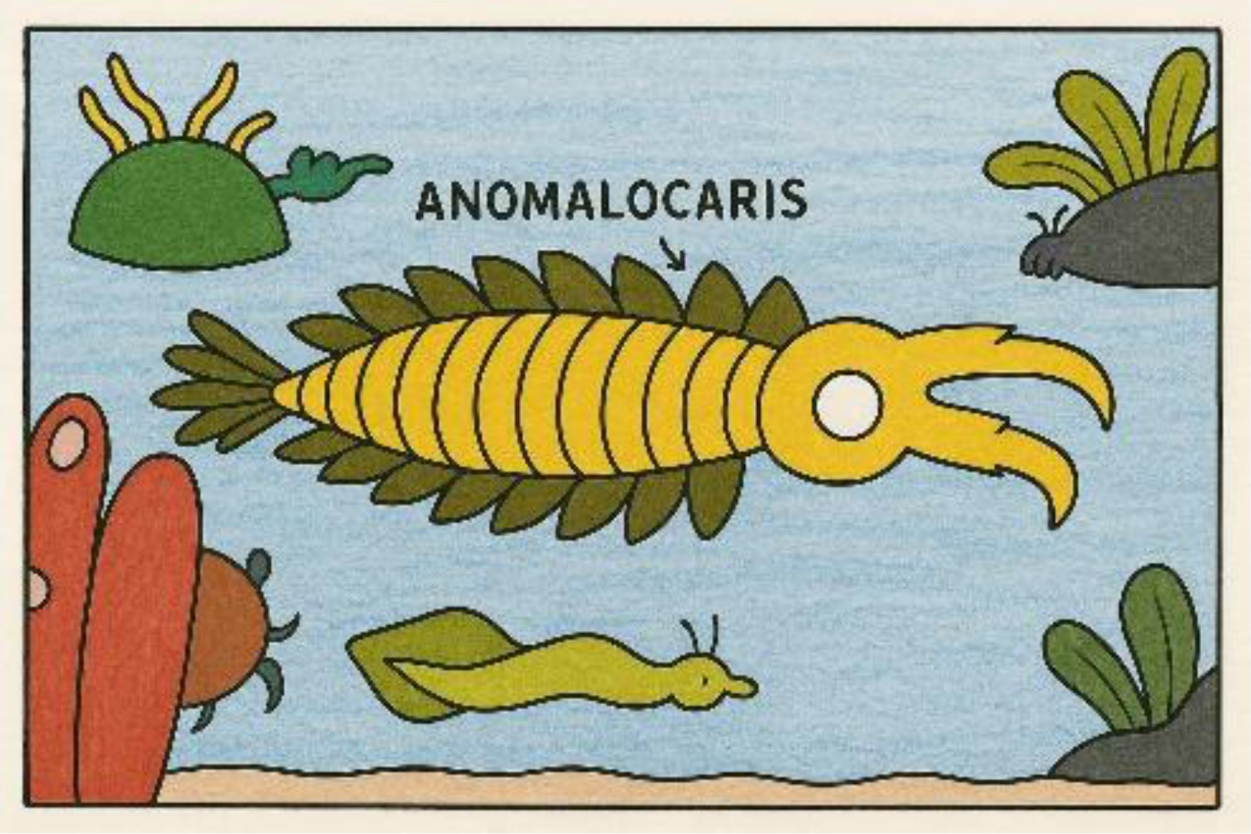
"You're too plain!" snapped Opabinia, wiggling its five eyes.

But, Pikaia just smiled and swam quietly.



Survival of the fittest: Even in the ancient ocean, everyone had something to say !!

But suddenly — whoosh! — a big monster zoomed by! It was Anomalocaris, the scariest predator in the ocean! All the animals ran to hide. But not Pikaia! Pikaia flipped its tail and zipped away. Twisting, turning and gliding like a streamer in the wind.

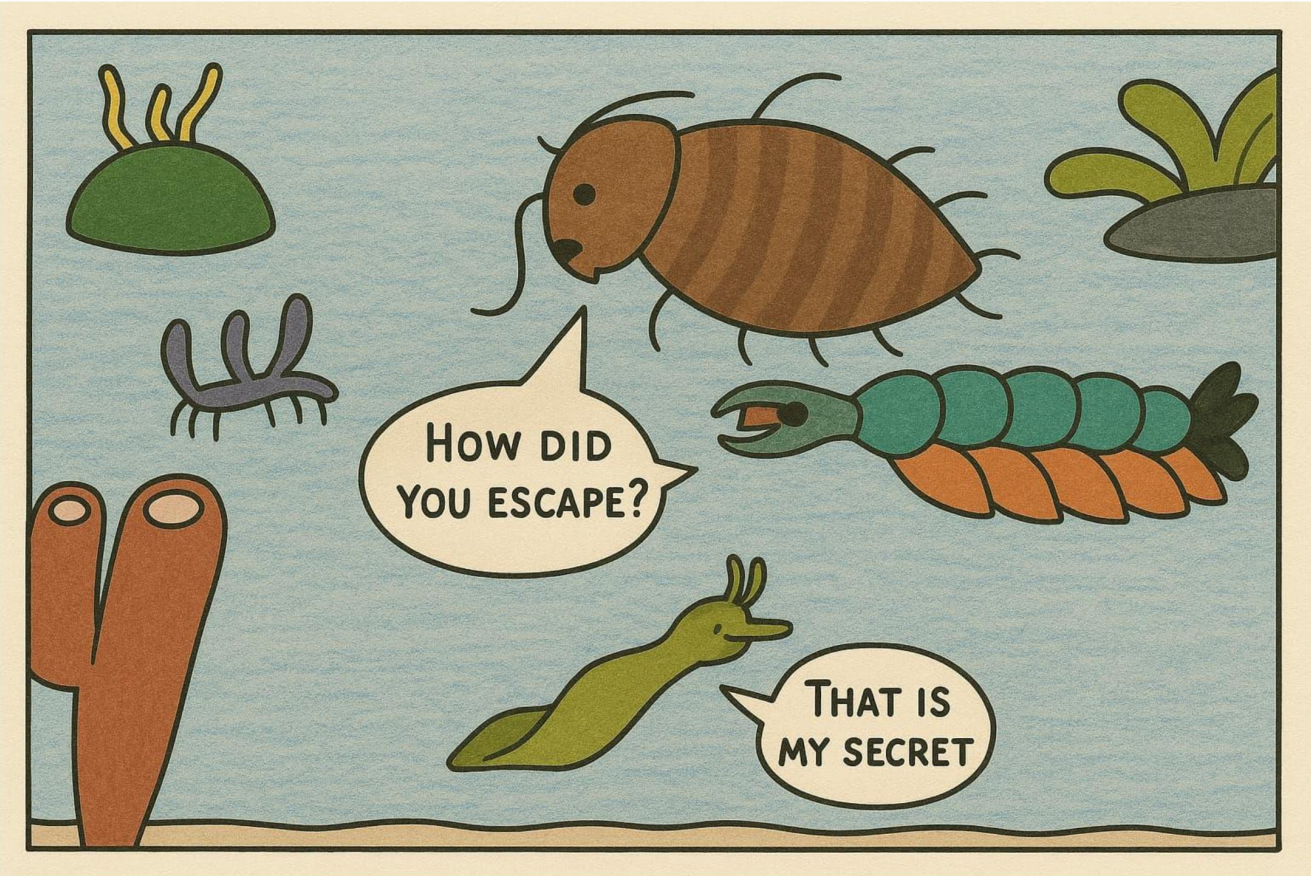


Watch out! The dominant Cambrian predator Anomalocaris is here, and it's hungry!

The monster couldn't catch Pikaia. When it was safe, the other animals came out. "How did you escape?" they asked. Pikaia smiled and whispered, "That's my secret." It swam in a circle and sang

"Inside me is something new,
One day, far in the future,
Animals with bones will walk on land,
Fly in the sky, and even build cities
and they all come from me."

The animals blinked. “From you?” “Yes” said Pikaia. And with that, Pikaia twirled in the sunlight, shining like a tiny ribbon of hope.



Pikaia’s secret!!


COLOUR
ME !!

TYRANNOSAURUS REX (T-Rex)

By Viyan Gautam – FFC Member

EVIDENCE OF A GIANT SHARK

A FOSSIL COLLECTOR'S DREAM

Written by Gerald Bogan - USA, Texas

Hello everyone,

I would like to introduce myself as a collector and lifelong enthusiast in the subject of geology and palaeontology. These are fascinating subjects for which I think anyone can learn a love for and gain great satisfaction in understanding. As a youth and growing up in the state of Texas, USA, I had an interest in natural history gained from publications, artistic renditions of dinosaurs and the occasional visit to local museums. My intrigued deepened substantially as I came to realize that I lived within a region that is perhaps one of the most prolific producers of a diversity of fossil material due to a wide range of geologic ages and exposures at the earth's surface.

I soon began exploring local areas in and near my hometown in N Central Texas to discover that indeed there were fossils everywhere ! Not the dinosaurs that had captured my attention previously, but marine organisms, as the rock exposed here locally is from the Cretaceous Period, a time when much of Texas was covered by a shallow ocean.

Within maybe a year of exploring various outcrops I had found numerous clams, snails, oysters, corals, ammonites, beautifully preserved shark teeth and most mysterious and intriguing, a number of disarticulated bones. Knowing next to nothing about any of these, what they were, how they came to be preserved, their age, etc., I began to seek professional advice. This led me to become a member of the Dallas Paleontological Society and subsequently to much learning and many fossil collecting adventures that I hope I have the pleasure in relating to you all in future writings here.

ADVENTURE TO THE PCS MINE, N. CAROLINA.

As a member of the Dallas Palaeontology Society (henceforth DPS for brevity), I have access to collecting opportunities that are not available to the individual collector as I am on my personal and more local forays.

One such opportunity arose some years ago to a working mine about 2500 km. from my home in Texas. I usually couldn't justify the expense of such a faraway venture but this is a phosphate mine near Aurora, N. Carolina known worldwide for producing some of the largest and most beautifully preserved fossil teeth from the largest shark to ever exist- the Otodus megalodon. These teeth can reach heights of almost eight inches (20 cm.). This was an adventure I could not pass up.

I had learned previously that excavations there were into the Miocene and Pliocene Epoch marine sediment. Having no experience with fossils of this age, I made a point to research over the month or so of waiting, the mine operations and fossils commonly found there. As it turned out this was a wise thing to do and greatly enhanced the experience.

Finally the day came to go and I boarded a two hour flight to N Carolina where I was met at the airport by several members of our group. We checked into a hotel about 80 km. from the site we would be collecting the next morning. That evening was of joyfulness shared among us as good friends and as we excitedly discussed the prospects and our expectations for the next day.

Before dawn we were up and crowded into a rental car and cheerfully on our way to the mine where we would meet several other members of our group who had driven themselves over the lengthy journey from Texas.

From the parking area at the mine entrance we boarded and old school bus provided by the mine and were transported deep into the areas of the mine operation. We gathered outside for a briefing on hazards and safety measures, then turned loose to choose our own path of exploration.

This mine is unbelievably large and appeared to extend from one horizon to the opposite. I immediately scrambled to the top of one of many mountainous spoil heaps scattered across the landscape for a visual survey of the layout and a plan of direction to take.

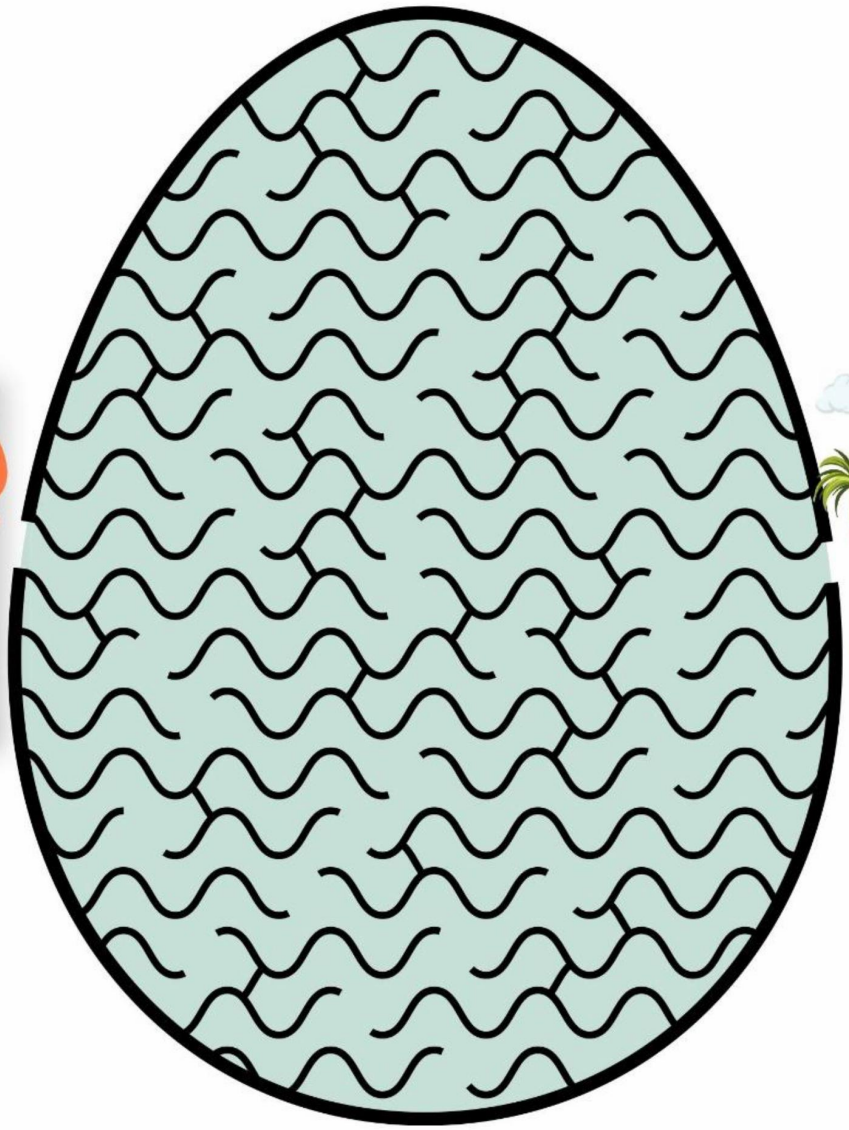
Much to my amazement there were many small heaps of white objects laying about within my range of sight and sharply contrasting with the dark gray sediment of the local formation. Upon approaching one of these white patches I was astonished to discover they were disarticulated fossil whale bones. Some too large to fit in a five-gallon bucket I had brought along. In my excitement at seeing these my first reaction was to collect them all! I quickly realized though that I could only carry out a very limited amount of bulk and weight and reserved myself to only taking a few of the more notable pieces. Besides, I had other ambitions, specifically to look for the prized megalodon teeth!

I began to temper my initial excitement and slowed my search to detect smaller and more obscure things. I soon began to find shark teeth, bony fish teeth and a variety of invertebrate fossils such as some beautifully preserved clams and snails.

As our allotted time there expired I was reluctant to acknowledge that my time had elapsed so quickly at such a wonderfully fossiliferous site, however pleased I was with my finds for the day. As I begrudgingly began walking back to the meeting place I watched the ground intently and picked up several more small shark teeth as I vowed to be back one day. Sadly the mine closed permanently to visitors the next year. I am very happy though to have had such an opportunity and for the nice collection that is a constant reminder of the wonderful adventure I had there.

Dino Egg Maze

Assist the baby dino in finding its way to join his friends.

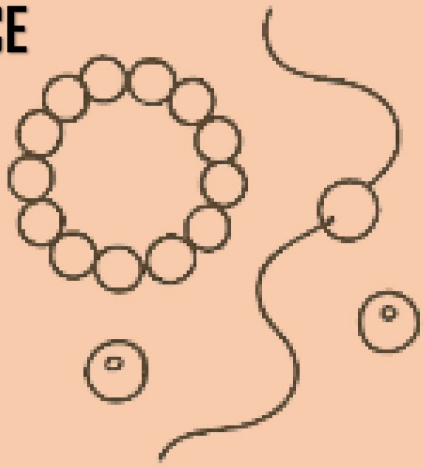


- Guntaj Singh

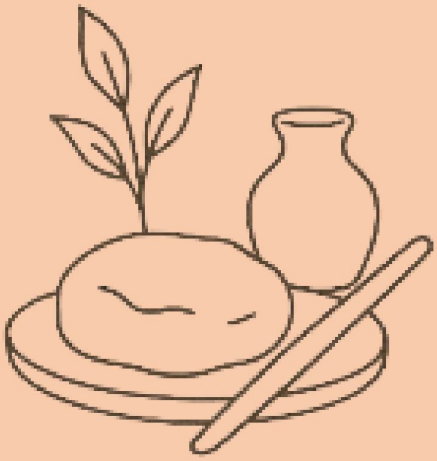
DIY ORNAMENTS

MAKE YOUR OWN FOSSIL NECKLACE

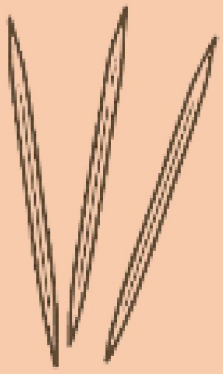
SUPPLIES :



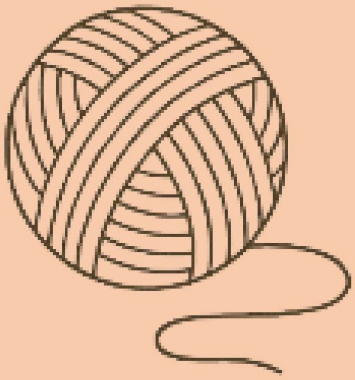
BEADS



AIR DRY CLAY



TOOTHPICK



STRING

LET'S GET STARTED :

1. Roll clay into small disks.

2. Press in a fossil or shell pattern.

3. Use a toothpick to make a hole for stringing

4. Let dry and decorate with paint

5. Thread onto string with beads

MY FAVOURITE FOSSIL !!

I am Eva Abraham and my favourite fossil is Dinosaur egg. I like it because I find them very interesting. When I was three years old I thought dinosaur baby comes out of normal eggs so I will not allow my parents to cut them. Then I grew up and understood it's not true. It is funny !! But now I allow many birds to make nest, in my balcony sparrow have nested. We have seen baby birds growing and flying out in our house. First I saw dinosaur egg fossils at Balasinor fossil park in Gujrat. There were two types of dinosaur nest. Titanosaurs and Abelisaurid. Second time I saw them at. " Dinosaurs among us exhibition ". There were two titanosaurs fossil eggs I read somewhere dinosaur eggs have been found in Balasinor and Madhya Pradesh. I have not collected fossil egg but I wish to do it. Dinosaur egg fossil with embryo are rare to find but, I hope to find them in future.

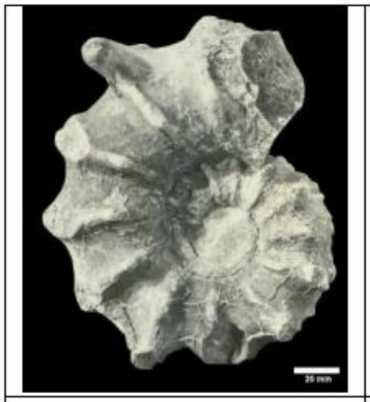
ALLURING AMMONITES IN ARIYALUR

We all know that the sedimentary rocks were laid down under water either in lake, river, lagoon or sea. It is natural that the organisms that survive in water in ancient times get buried in those sediments after death. These sediments later become rocks due to subsequent burial to considerable depth and again brought up to the surface due to tectonic movements. It is the pleasure of the fossil collector to go and search for fossils in those sedimentary areas in all states of India. One of those sites, that is best known to yield abundant, alluring and artistic Cretaceous ammonites is situated around Ariyalur town in Tamil Nadu.

Two ammonites in a single concretion- Anaipadi

A giant ammonite - Varagur

Limestone in Kallakkudi in the south, Clays in Kari in the west, Calcareous concretions in Kunnam in the north and the extensive marls and limestone in Kallankurichchi in the east are the best localities for collection of fossils. Usually, fossils are collected on the stream floor or on the wall. Open cast mines form an important source for fossils. Though the character of the rocks differs, the presence of ammonites remains high due to the enormous population of those animals that have been swimming in the Cretaceous Sea.



Ammonite with strong ribs and spine - Odiyam

Ammonite showing sutures - Karai

The ammonites are small to big, coiled and uncoiled, plani-spiral or trochoid and ornamented or smooth. The variety, shape and size of these ubiquitous ammonites make one gasp with awe. One start thinking that how did, for heaven's sake, I missed these so long to see and collect?

Tightly coiled ammonite – Kunnam

Ammonite uncoiling the last whorl - Karambium

What do you do when you collect the ammonite? First and foremost is to locate yourself in the map of the area that is provided to you or use the GPS and record in the mobile phone. Then, the attempt to get the ammonite out of the rock. If it is floating (not attached to a rock) piece, then it is picked up by hand. If it is buried partially in the rock, chiselling and hammering may help in extricating them. On a few occasions, boulders of shale may be broken to obtain the fossil, especially the giant ammonites. Once collected, the ammonite is

given a field number so that the locality and date are recorded faithfully for future taxonomical analysis by anyone. If not, confusion about identification and stratigraphical order becomes uncertain.

Straight shelled ammonite; cross section showing siphuncle (small circle on top of the specimen - Ottakkoil

Vertically coiled ammonite - Maruvattur

Once you have seen an ammonite, what is the first impression you get- Its size. There are small ammonites less than one centimeter in diameter and giants as big as one meter diameter. The second aspect that comes into view is the ornamentation – keel, rib, tubercle, spine, striation and constriction. Some have smooth shells. The siphuncle, the pipe that connect all chambers lie on the outer side of the shell. Once the shell is removed by weathering or by a human effort, the sutures are revealed which is the trace of dividing wall between chambers of ammonites on shell. The sutures may be simple lines or loops or highly crenulated waves like an edge of a dried leaf. The chambers are connected by a siphuncle located on the outer edge or the ventral side of the shell.

Keeled ammonite - Kallakkudi

Ammonite with bifurcating ribs - Kulattur

After a long and tedious field work, many ammonites were collected. Now, what do you do with the ammonite? There are a few points. The first is the scientific processing of the cleaned and developed ammonites and bring out a publication on them emphasizing the stratigraphical importance, first occurrence in India or the redescription of species that are not well documented in literature. The specimens of the published articles are usually deposited in a museum, like the Geological Survey of India repository, GSI, Kolkata 700016 or the Egmore Museum, Chennai 600008. The second will be to clean the fossil and polishing it as a decorative piece in the house or for sale. Very rarely people donate fossils to others. With these small suggestions, I wish you all – A HAPPY FOSSIL HUNTING !!

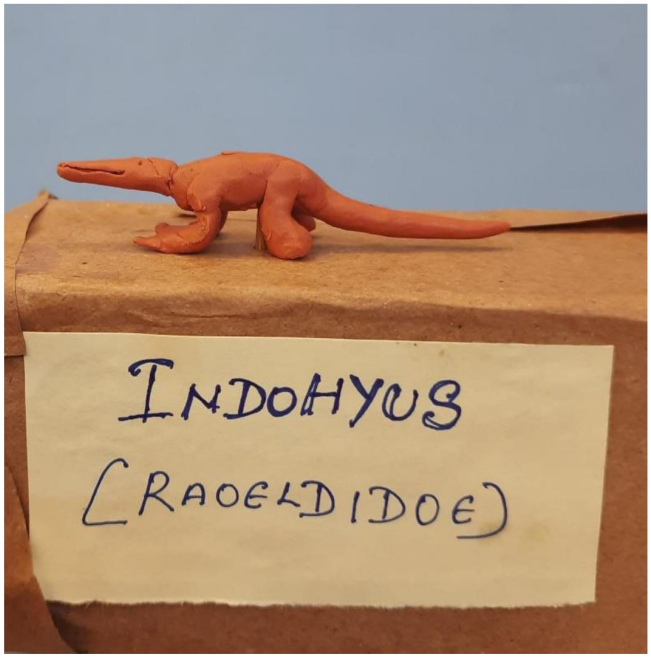
A beautifully and near completely preserved ammonite - Maruvattur

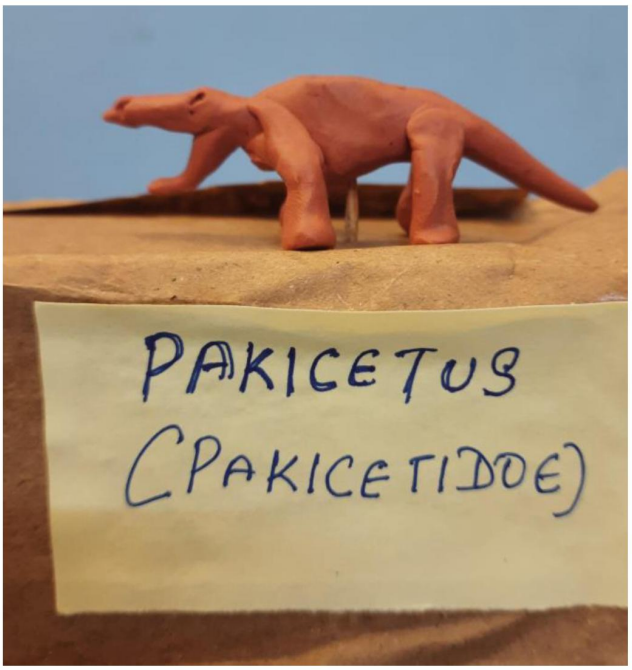
Dr K Ayyasami, Ph. D.
Formerly of the Geological Survey of India

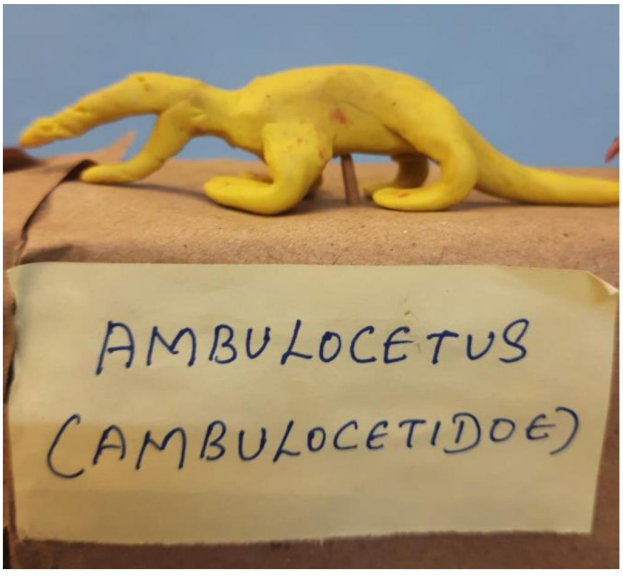
CLAY MODELLING ON EVOLUTION OF BLUE WHALE

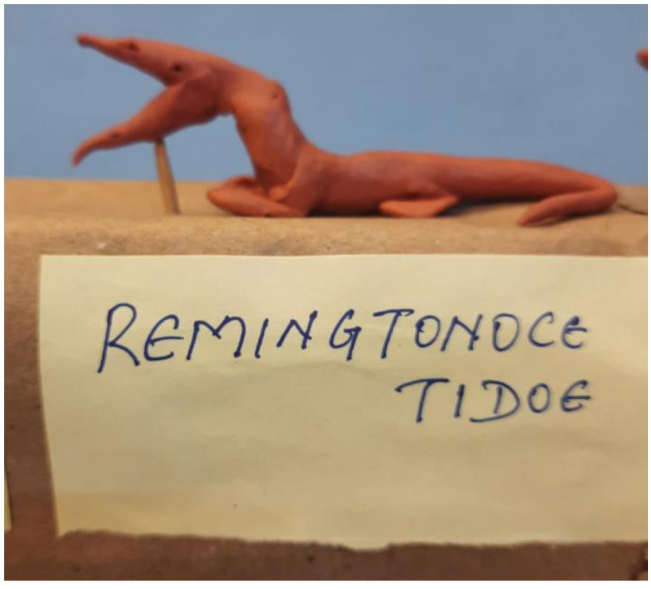
by

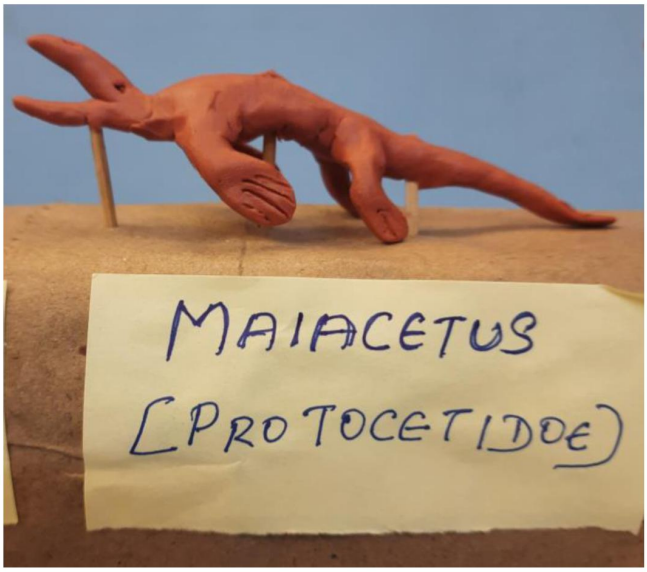
T. Pranav

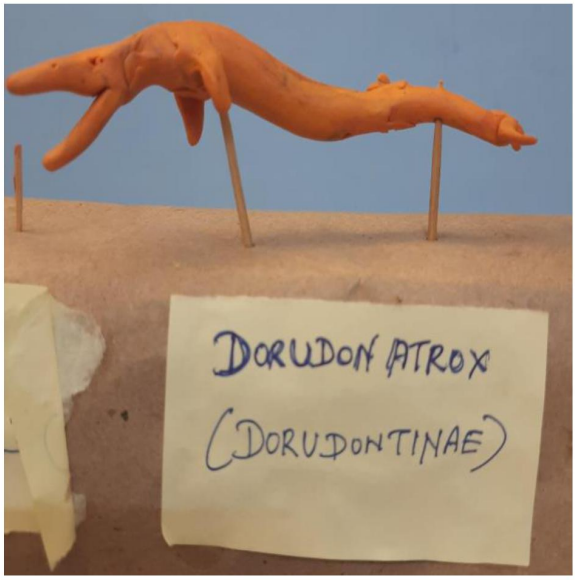


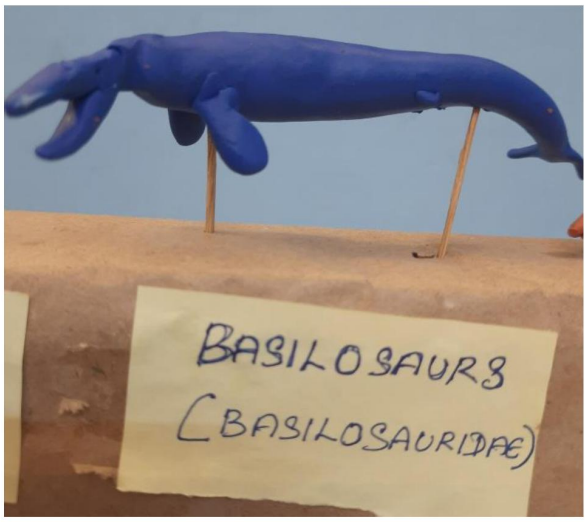


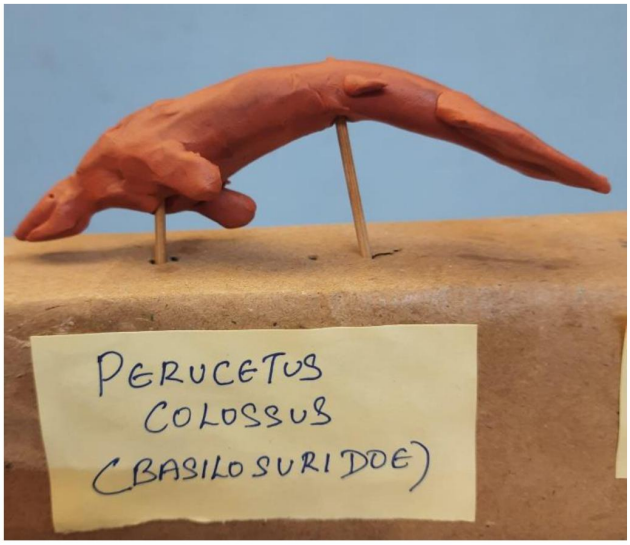





MAIACETUS
[PROTOCETIDOE]


DORUDON ATROX
(DORUDONTINAE)

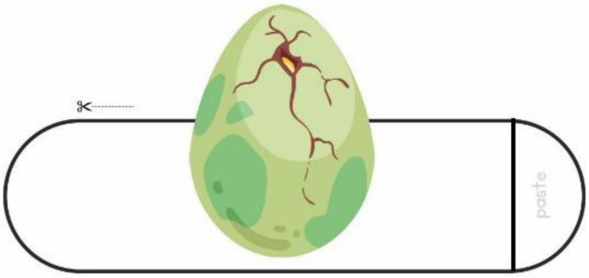

BASILOSAURS
(BASILOSAURIDAE)

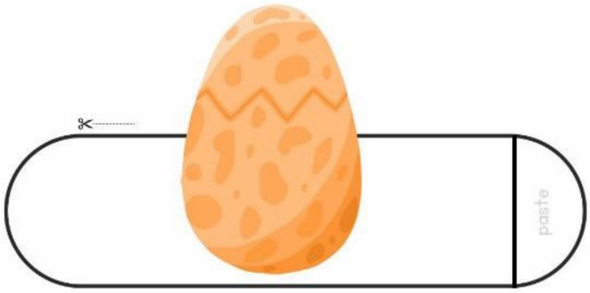

PERUCETUS
COLOSSUS
(BASILOSURIDOE)

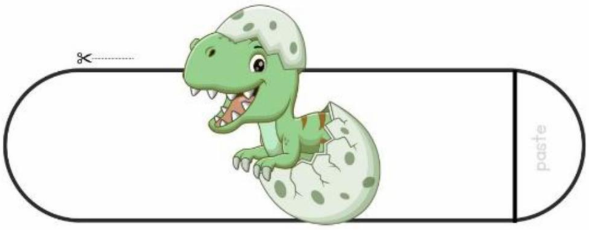

BLUE WHALE
[CETACEA]

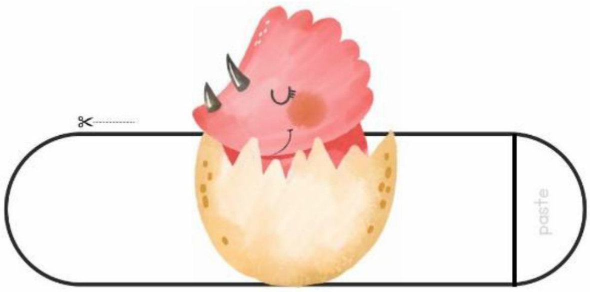
FINGER PUPPETS

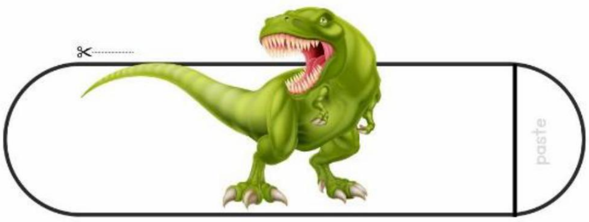
Cut out and paste the ends together to make a finger puppet.

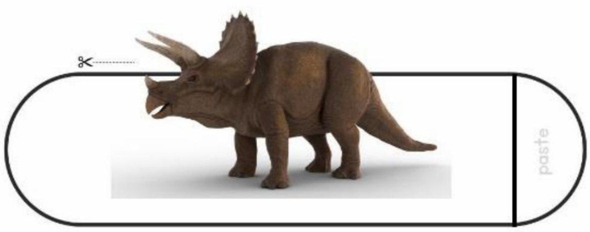


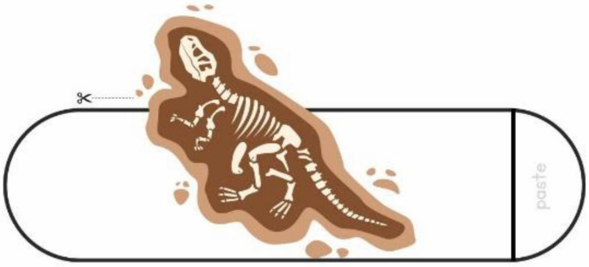












- Guntaj Singh

EVOLUTION OF BIRDS

- Griffin Beno

One of the greatest mysteries of life on earth that remains unravelled is the evolution of birds. Imagine a bird gliding over the valleys and a dinosaur leaping on its prey. Both movements share the same kind of hand and head gestures. Now, how are they both related ? The answer dates back, however, to 160 million years ago, back in the Jurassic period. Journey with me, to the age of the dinosaurs. It's a windy cold day in southern Germany. Huge flying reptiles that weren't dinosaurs, but pterosaurs ruled the skies. Small, fast, and cunning 2-legged dinosaur, juravenator was roaming over the valleys. Now, in the woods, a creature that walked on two legs, had wings, teeth, and a long tail that looked like a lizards', was searching for food. Its name was archaeopteryx. But little did it know that it was not alone. A medium sized 2-legged meat-eating dinosaur, sciurumimus was too looking for its food. By the indistinct sound made by the feathered body of archaeopteryx, the gaze of the hunter was drawn towards the iridescent omnivore dinosaur. The sciurumimus, at its peak, chases the archaeopteryx and corners it to a mountain cliff. but surprisingly, the fact that the winged dinosaur was misjudged. It casually pushed itself from the cliff and spread its wings to glide! Maybe the hungry hunter should go for something else. But how did an ordinary small dinosaur get wings? Feathers initially weren't meant for flying. It was just a change that appeared in the dinosaur's body, that even archaeopteryx wasn't aware of. Additionally, as Germany was a cold place to live, feathers helped the dinosaur thrive. After thousands of generations, this feature would have driven the species into a separately new species, in this case, archaeopteryx. Now, although wings were not meant for flying, it was accidentally discovered. After more generations, the tail shortened, the teeth disappeared, the claws were covered by flesh, and evolved into every single bird we see today. So dinosaurs hadn't exactly vanished; they had evolved into birds !

PALAEO ADVENTURES FOR YOUNG EXPLORERS

- B. Niveda

Date:21/4/2025
Day:Monday

Subject: Experience during summer camp at Little Elly school

Hello Everyone,

In the summer camp I studied about Paleontology and about the fossils.my favourite fossil is dinosaur. It is so huge and magnificent I also have a pen topper in it. But, now let's talk about the experiences in my summer camp with my new found friends- Mughilan Anna and Imayan .in this session we did puppetry, first Akka demostrated it and we enacted as Ammonite and Mososaurus.

Then we did fossil digging it was such a fun, I imagined like digging the fossils at the fossil site. All had a super ecstasy day.

Word Search

ROAR!

J	A	E	L	I	T	P	E	R	S	M
U	B	X	R	F	H	I	R	R	P	S
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A	O	I	E	S	E	E	V	A	E	O
S	O	N	N	S	N	H	I	S	T	E
S	M	C	U	I	O	V	N	O	E	C
I	A	T	N	L	B	R	R	N	O	A
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I	B	H	T	S	D	I	C	D	O	E
H	E	R	B	I	V	O	R	E	I	R
H	E	R	O	V	I	N	M	O	D	C

DINOSAUR CARNIVORE METEOROID

REPTILE HERBIVORE JURASSIC

EXTINCT TRIASSIC CRETACEOUS

OMNIVORE BONES FOSSIL

- Guntaj Singh

FOSSIL FOREVER CLUB'S FIELD VISIT TO ARIYALUR

On October 15th: On account of International fossil and Geodiversity day FFC members were taken to a education trip to Ariyalur. We visited the Geoheritage site Karai for sample collection. Members collected some **Ammonites, Belemnites, Oyster shells and Gastropods** there. In order to increase the awareness of Geodiversity conservation FFC members hosted awareness campaign with placards and chart. Followed by that Fossil forever club Members were taken to Geoheritage site, Sattanur Fossil wood park and fossil education centre adjacent to it, which was assisted by my mentor Prasad sir with Perambalur collector Venkata Priya ma'am to put up during 2022. Later, Under the guidance of my mentor Prasad sir FFC members were introduced to the sedimentary layers of TANCEM mines of Ariyalur group where they collected fossils of **Stigmatophygus, Rastellum, Terebractulla, Rhynconella, Gryphea, Oyster, Pecten and some bryozoans.**

SECRET OF THE SEA

Beside the mighty sea,
Sand, sky and wind so free,
A little girl was picking shells
Washed ashore by tidal spells.

She found a rock, so odd, so old —
It shimmered in sun with lines of gold.
She turned it round with tiny hands,
Not like the shells found on the sands.

Curious as ever, she asked her brother,
What that rock could be ....
He thought for a while, and said with a smile
"Must be a creature from the ancient sea"!

"In the Devonian, it's story began,
It lived for years, three fifty million,"
"It's an ammonite, from seas long past —
A story in stone, held tight and fast."

The little girl listened, eyes so wide,
She felt a pull, a spark inside.
She saw the sea not just as blue -
But full of lives she somehow knew.

~ Ivy Nguyen Sen

THE INTERNATIONAL EARTH SCIENCE OLYMPIAD (IESO): A PRIMER

by

Rajasekhariah SHANKAR, Coordinator, IESO

Email: rshankargeo@gmail.com

Dear Students

Greetings from the **International Geoscience Education Organisation (IGEO) !** This article provides a broad introduction to what IESO is, its aims and objectives, its components and how you can possibly participate in it. Read on and hop on to **IESO**

What is IESO?

IESO is a flagship activity of the International Geoscience Education Organisation (IGEO; www.igeoscied.org) that is held every year during August/September in a pre-decided country. It started in 2007 in South Korea with the participation of only a few countries. However, it has grown in stature and in the number of participating countries over the years.

The main objectives of IESO are:

1. To enhance the quality of Earth Science Education in schools across the world,

2. To kindle interest in Earth Sciences (ES) among school students and enhance public awareness of ES,

3. To encourage friendly relationships among young learners from different countries, and

4. To promote international cooperation in exchanging ideas and materials on Earth Sciences and Earth Science Education.

Who can take part in IESO ?

You can participate if you are studying in a high school or higher secondary school. However, you should not be enrolled in a college/ university at the time of participation in IESO. You should NOT have been born before July 1, X-19 (X = the year of IESO). For example, for IESO 2025, the threshold is July 1, 2006. There is no discrimination based on caste, creed, colour or gender.

A national team comprises four students and two mentors. More students can register as guest students but they will NOT be entitled to any award or medal. You can take part in an IESO only once - as a team member or as a guest student. IESO statutes, syllabus and further details at www.igeoscied.org

How can you take part in IESO ?

You must be part of your national team chosen to represent your country at IESO. So, get in touch with the nodal agency in your country that chooses the national team. For example, in India, it is the Geological Society of India.

What is the registration fee for a team ?

Each national team has to register with the IESO hosting country, paying a registration fee of 1,000 Euros. Developing country teams can request for a waiver. Registered teams are entitled to accommodation, food and local transportation related to IESO. International travel and insurance are the responsibility of the national team.

What are the activities in IESO ?

You will have exciting activities in IESO! We consider IESO as a vehicle to promote earth science education in schools across the world. The various test components of IESO, therefore, aim to do just that: introduce and promote experiential learning, analytical skills, and (earth) systems thinking amongst participants. These are in dire contrast to the rote learning that goes on in classrooms in

many parts of the world, giving rise to a disinterest in earth science; as a consequence, brilliant, enthusiastic students like you do not choose earth sciences for their higher education and careers.

IESO comprises activities of both competition and cooperation - Written test and Practical test in the first category; the Earth Systems Project (ESP), and the International Team Field Investigation (ITFI) in the second.

1. Written Test (WT): will have multiple choice questions (involving more than one earth system) that will make you think, analyse the given data and then arrive at the correct answer. Rest assured that they will be from within the official IESO syllabus (www. …), will be of high school standard, and will not demand high level mathematics from you. OK?

2. Practical Field Test (PFT): will have questions that encompass as many earth systems as possible to make the question paper wholesome. They will involve field observations and/or small laboratory experiments. All the necessary gears will be provided that will help you arrive at the answer.

For WT and PFT, participants will be awarded gold/silver/bronze medals individually based on their standing in the merit list. Next, we move on to co-operative activities. One of the main objectives of IESO is to promote international co-operation and forge bridges of friendship among young, talented students across the world. To achieve this, IESO organises two activities: International Team Field Investigation (ITFI) and Earth Systems Project (ESP). They make IESO unique! In this respect, IESO is different from all other

international science olympiads. The spirit here is not competition but cooperation – cooperation among students from different nationalities, with diverse cultures and varied backgrounds. This is important today, and much more so in future, because major strides in scientific research are no longer possible by the efforts of individual scientists but of groups of scientists from different disciplines, institutions and nations. Each international team will consist of 6-8 students.

3. International Field Team Investigation (ITFI): starts with a research question for a project site. It involves field investigation, laboratory work using state-of-the-art instruments where possible, and data gathering and interpretation. You, as part of the group, will do all these and come up with a hypothesis and answer the research question. Your group will prepare a report and make a PowerPoint presentation.

4. Earth Systems Project (ESP): An ESP topic is of significance to the hosting country/region and involves many earth systems (For example, the Indian monsoon for the IESO in Mysore). It lays emphasis on the evaluation and development of the following scientific skills: data collection, data analysis, reasoning, systems thinking, communication and collaboration and oral and written

presentation. You, as part of a multinational groups of students, will research the topic analysing the data you collect from the internet. Your group would present the results and findings as a poster.

Your ITFI presentations and ESP posters will be evaluated by international juries. Deserving teams will be awarded team medals in gold/silver/bronze categories.

All IESO participants will receive a certificate of participation. You can use it while seeking admission to universities! Besides the above, there are two activities that you can take part in: the International Geoscience Youth Movement (I-GYM) and the Young Reporters Program.

5. International Geoscience Youth Movement (I-GYM): intends to inspire and engage young students of ES. Interested participants of IESO at an evening session share their experiences in spreading the importance of earth science ES and ES education in their schools and regions. It began in 2024 for which the keynote speaker was Ms. Aswatha Biju. I bet you know her already! She made a presentation on her activities like workshops for interested students and general public, collection and research on fossils, and the establishment of Fossil Forever Club. You too could share your experiences at IESO! As a follow up, we are organizing a week-long workshop in July at Bengaluru for participants who signed up last year. They will experience **(a)** the Earth Systems Education approach (inquiry-based learning, field exploration, and integration and systems thinking); **(b)** Social activities to consolidate a cohesive group with a common goal; and **(c)** Activities to hone and strengthen Leadership skills.

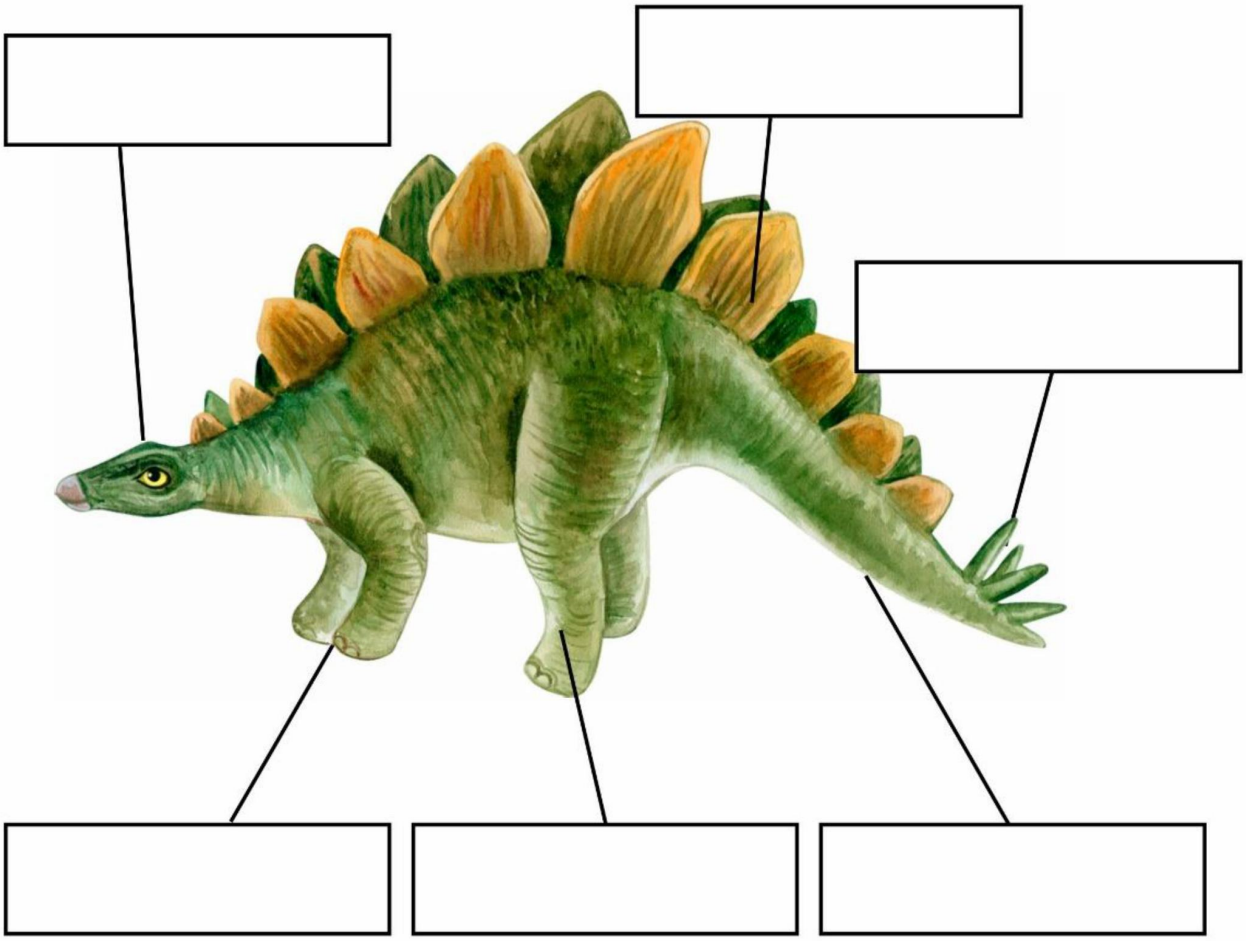
6. Young Reporters Program: Its main goal is to foster understanding, raise awareness and train the next generation of science communicators. Passionate and talented young/ early career geoscientists like you will interview relevant authorities, create reports, videos and essays to inform and engage the general public on various topics related to geosciences; in particular natural and human-induced hazards, curious geologic phenomena and the like.

like. You will explain in your essay/ video how we study planet earth and the ways in which our actions as individuals have an impact on Planet Earth.

Besides, you will experience a cultural trip of the host city and the glittering opening and awards ceremonies !!

Parts of the Body

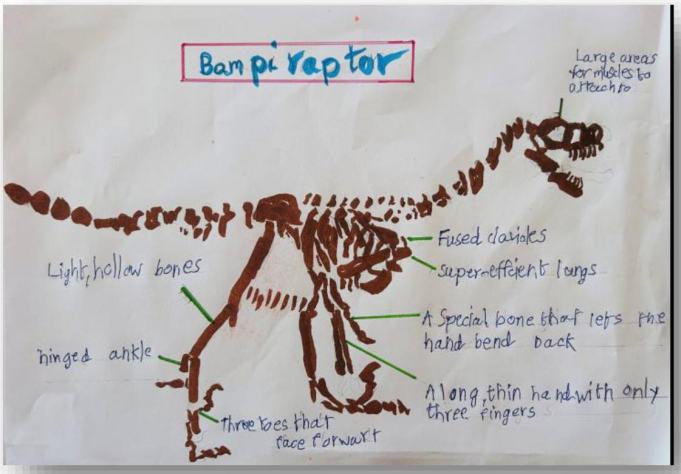
Use the words below to label the parts of the stegosaurus:



plates	spikes
head	toes
tail	hind legs

- Guntaj Singh

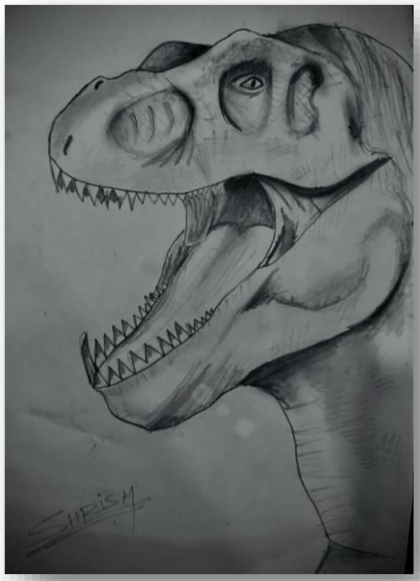
ART GALLERY



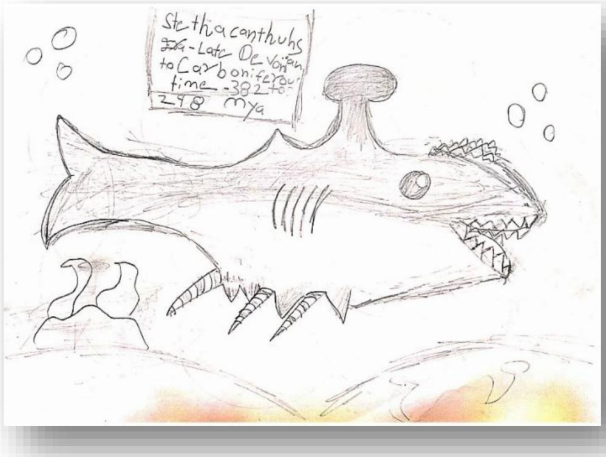
Rithvik

Kaivalya

Griffin Beno



Shrish



Eva Abraham

Janani Atchaya

FOSSIL FOREVER CLUB'S EARTH DAY COMPETION WINNERS

IN COLLABORATION WITH INTERNATIONAL GEOSCIENCE EDUCATION ORGANISATION(IGEO)

WINNER OF ROLE-PLAY CONTEST

Name: Eva Abraham

Age: 7 yrs

State: Maharashtra

CERTIFICATE

OF MERIT

1st PLACE

Proudly Presented to :

EVA LIBEN ABRAHAM

For the insightful approach with wise efforts towards the Earth Science Education programme hosted by Fossil Forever Club in collaboration with International Geoscience Education Organisation

NIR ORION
CHAIR, IGEO

ASWATHA BIJU
FOUNDER, FFC CLUB

DATE :

WINNER OF " LETTER TO AN ALIEN " CONTEST

Name: Guntaj Singh

Age: 6 yrs

State: Punjab

CERTIFICATE

OF MERIT

1st PLACE

Proudly Presented to :

GUNTAJ SINGH

For the insightful approach with wise efforts towards the Earth Science Education programme hosted by Fossil Forever Club in collaboration with International Geoscience Education Organisation

NIR ORION
CHAIR, IGEO

ASWATHA BIJU
FOUNDER, FFC CLUB

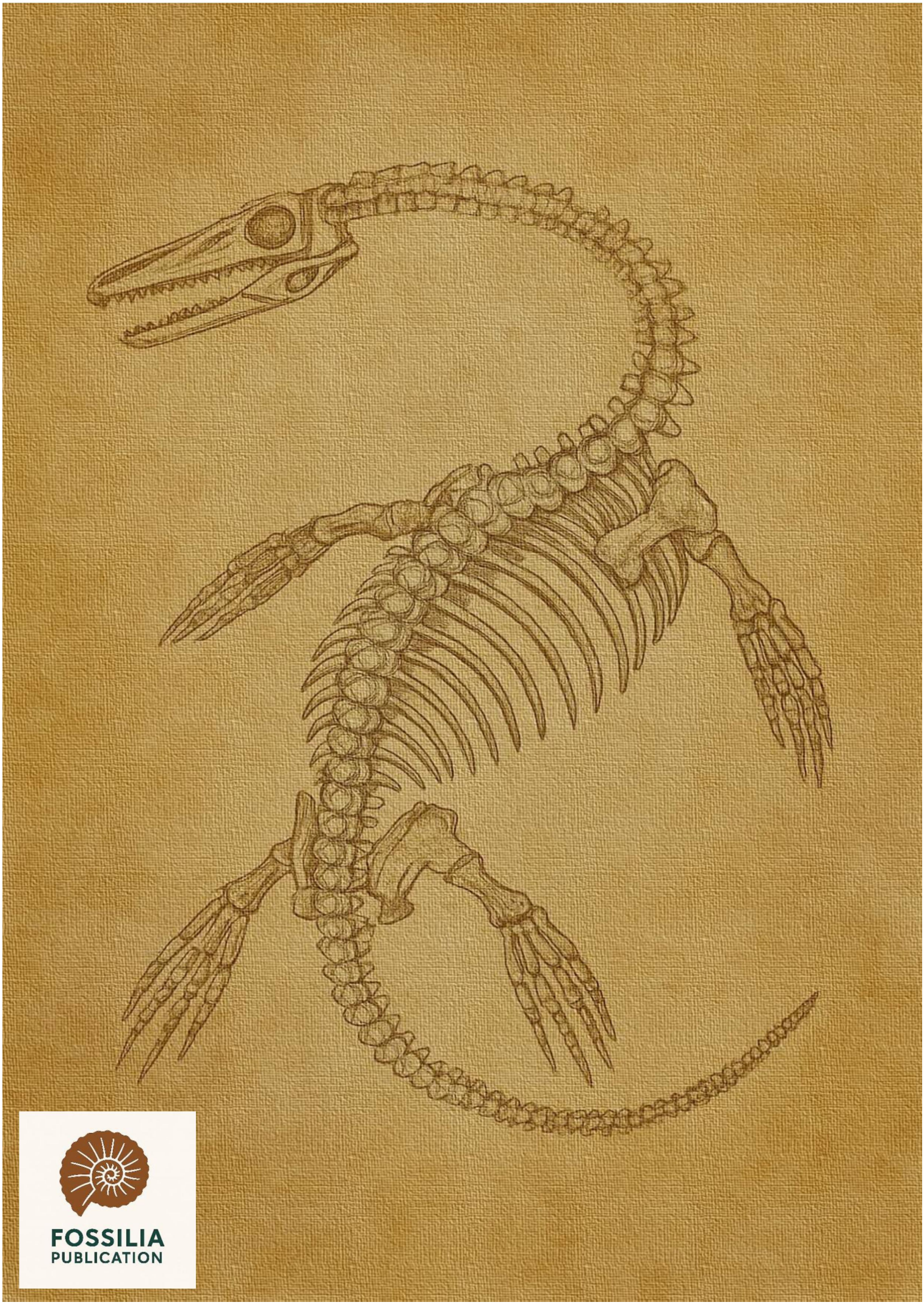
DATE :

JOIN

FOSSIL FOREVER CLUB

GET CONNECTED THROUGH

fossilforeverclub@gmail.com



FOSSILIA
PUBLICATION