Pitchandikulam Art Collective

METIER AND MEDIA OF WILDLIFE ART OF PITCHANDIKULAM

The experiments at Pitchandikulam in Auroville International Township carry on the tradition of ‘true wildlife art’ where naturalism and exactitude are the catchwords. Pitchandikulam has to a large extent concentrated on outdoor wildlife art, but nowadays some of the artists are turning towards a more studio-based and scientific culture (but these are only in the preliminary phase). Among the outdoor media experimented with are painting on Kadapa stone slabs, painting on granite stone slabs, painting on boulders, carving and painting on granite pillars, scaled up and life sized ferro-cement sculptures, cast iron and mosaic. Pitchandikulam was established in 1973 and since then it has been experimenting with imagery to sensitize people to the need to conserve native biodiversity, especially the coastal forests, popularily referred to as the Tropical Dry Evergreen Forest (TDEF for short) and its denizens. It continually tries to represent and share its experiences of wildlife through imagery, and with the availability of a variety of different media to choose from, everyone can express their interpretation in a personal way. Wildlife art seeks not only to generate an appreciation of the enthusiasm for the natural world, but also advance the interest, education and concern of the public in the conservation of wildlife.

MEDIA

KADAPPA SLAB PAINTING

Kadapa stone, also known as Cuddapah stone (from the original Telugu, Gadapa) and Kadapa Black or Madras Black (the latter two trade names), is basically a black limestone intruding into other rocks (quadrites, dolmites and shale). While the pure black rock slabs are polished and used in interiors, the impure slabs which contain other rock types show a variety of colours and textures in the unpolished form. It is these unpolished stone slabs that are used in painting. The challenge of painting on stone is to use the natural colours and textures to advantage. This demands clear cut composition of the theme to be portrayed and minimal painting of backgrounds. In fact, the crux lies in the background painting (or degree of lack of it) as backgrounds should enhance the natural colours and textures, not suppress them


LIFE CYCLE OF TERMITES
TERMITE MOUND
THE IMPORTANCE OF EATING WOOD
Termites are important "recyclers". Some have protozoa and bacteria in their digestive systems to help break down dead wood and leaves. Others enlist the help of fungi to do the job. The process returns nutrients to the soil for plant growth.


copyright NBR Park
EGGS
WORKERS
SOLDIER
QUEEN
KING


copyright Pitchandikulam

GRANITE SLAB PAINTING

Kadapa stone rarely exceeds a size of 7ft x 2ft, which means that approximately only 5ft is seen above ground (it is necessary to bury at least 2ft below ground for the stone to be stable). If dramatic compositions are necessary, it is advisable to paint on granite slabs which can be procured in any size. We have found that groupings of four to six stone slabs make effective confluent displays, especially if they have to be viewed from a distance. The only drawback of granite slabs is that they do not show the mixture of colours or texture of Kadapa stone, have a relatively rougher surface which cannot incorporate detail and, if they are large, may be difficult to move around and install without the use of heavy machinery.


POLLINATORS
Indian bees pollinate Gourd
Carpenter bees pollinate Milkweeds (Calotropis sp)
Rock bees pollinate Coffee
Dog faced bats pollinate Jatropha (Madhuca indica)
Sunbirds pollinate Loranthus
Papilionids pollinate Flame lily (Gloriosa Superba)

WOOD PAINTING

Painting on wood has the advantage of depicting fine details of the creatures portrayed since there is a relatively smooth surface on which to paint. But it takes more time to execute than stone slabs since the entire board has to be painted over and detail incorporated.

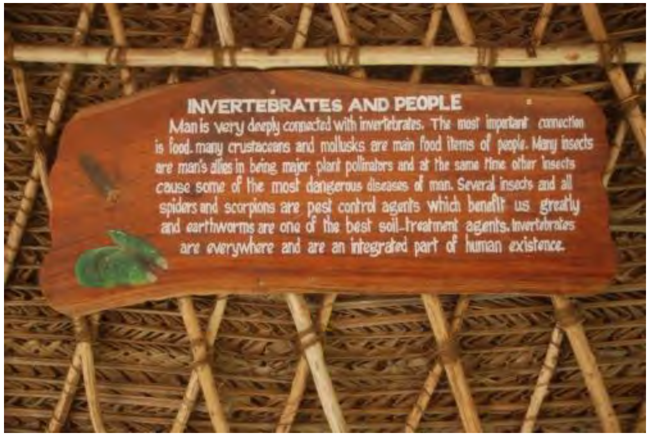




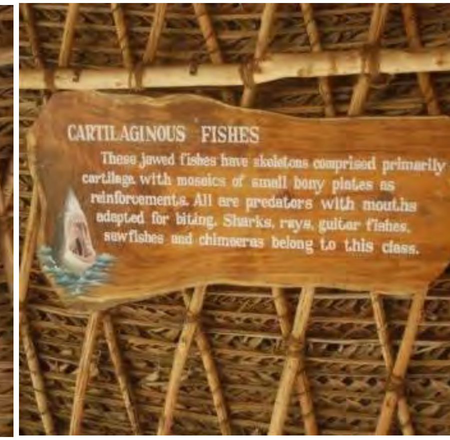




Plywood cutout

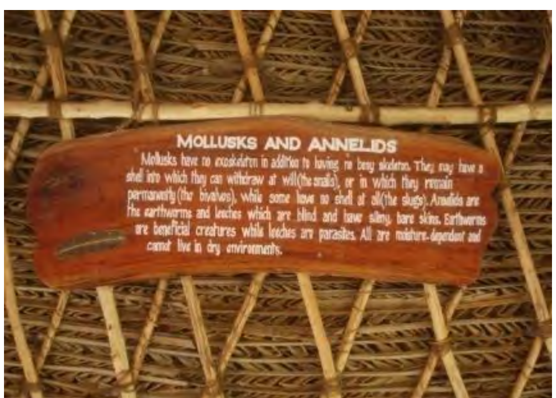

INVERTEBRATES AND PEOPLE
Man is very deeply connected with invertebrates. The most important connection is food. many crustaceans and mollusks are main food items of people. Many insects are man's allies in being major plant pollinators and at the same time other insects cause some of the most dangerous diseases of man. Several insects and all spiders and scorpions are pest control agents which benefit us greatly and earthworms are one of the best soil-treatment agents. Invertebrates are everywhere and are an integrated part of human existence.


INSECTS
The most common invertebrates at the Adyar poonga are insects which include butterflies, dragonflies, beetles, bees etc.
Insects have 3 body divisions, 6 legs, 2 antennae (feelers) and 1 or 2 pairs of wings (except primitive insects) Most have a pair of compound eyes and mouths for biting or sucking. Some can sting and all reproduce through eggs. Insects form the largest group of invertebrates in the world. They reproduce through eggs and many undergo metamorphosis (the change from a worm-like form to an insect-like one).


CARTILAGINOUS FISHES
These jawed fishes have skeletons comprised primarily of cartilage with mosaics of small bony plates as reinforcements. All are predators with mouths adapted for biting. Sharks, rays, guitar fishes, sawfishes and chimeras belong to this class.


Beaks and feet
அலகுகள் மற்றும் பாதங்கள்


What is a Bird?
A bird can be very aptly described as a Feathered Biped ('biped' means two-legged). This is a very specific description and cannot apply to any other creature. Besides their unique feathers, birds have mouths modified into horney beaks, lightweight bones, good eyesight, reproduce through eggs, and most can fly. With very few exceptions, birds have no sense of smell.
பறவை என்றால் என்ன?
ஒரு பறவையை, இறக்கைகளுடைய, இரு கால்களுடைய உயிரினம் என்று விளக்கலாம். இக்குணங்கள் பறவைக்கு மட்டுமே பொருந்தக்கூடிய, வேறெந்த விலங்கினத்திற்கும் பொருந்தாத தனிச்சிறப்பு ஆகும். பறவைகள் இறக்கைகள் மட்டுமல்லாது, வலிமையான அலகினையும், எடை குறைவான எலும்புகளையும், நல்ல பார்வைத்திறனையும், முட்டைகள் மூலம் இனப்பெருக்கம் செய்தலையும், மற்றும் பெரும்பாலும் பறக்கும் திறனுடனும் காணப்படும் ஒரு சில பறவைகளைத் தவிர ஏனைய எல்லாப் பறவைகளும் நுகரும் திறன் கொண்டிருக்காது.


MOLLUSKS AND ANNELIDS
Mollusks have no exoskeleton in addition to having no bony skeleton. They may have a shell into which they can withdraw at will (the snails), or in which they remain permanently (the bivalves), while some have no shell at all (the slugs). Annelids are the earthworms and leeches which are blind and have slimy, bare skins. Earthworms are beneficial creatures while leeches are parasites. All are moisture-dependent and cannot live in dry environments.

Directional Signage

MURALS

If both large dramatic images and heavy textual information is to be portrayed, it is effective to use wide vertical or wall surfaces for painting. Since too much detail cannot be incorporated these paintings should be viewed from a distance.


கோவில் காடுகள்
SACRE
Sacred groves represent an ancie
respect, sentiment & fear. They are the
veritable gene pool of natural resources
These sacred groves are small patches
Most deities seen in villages are small (Sometim
ranging from less than an acre to litts more
Mariamman) in her various forms and attendant
Kanniyamman, Angalamman, Pidari, Ellai and o
swords and often even a skull in one hand.
Every sacred grove is a spirit world to wi
roam about at night protecting villagers from evil
groves is Ayyanar who always has a separate shri
regarded as a good & benevolent protector.
The tradition of maintaining sacred groves are
In an area that has been under pressure from the tw
Evergreen Forest (TDEF) type.
Hence, the conservation of sacred groves and tr
has a great tradition of conservation of natural resou
attached to sacred groves has to be maintained, othe
conservation efforts would vanish resulting
policy which would recognize sacred groves
sentiments and as a repository of biodive
will be sustainable for all time.

CARVING ON GRANITE BOULDERS

The onus here is to use the shape of the stone to form the natural contours of the animal.



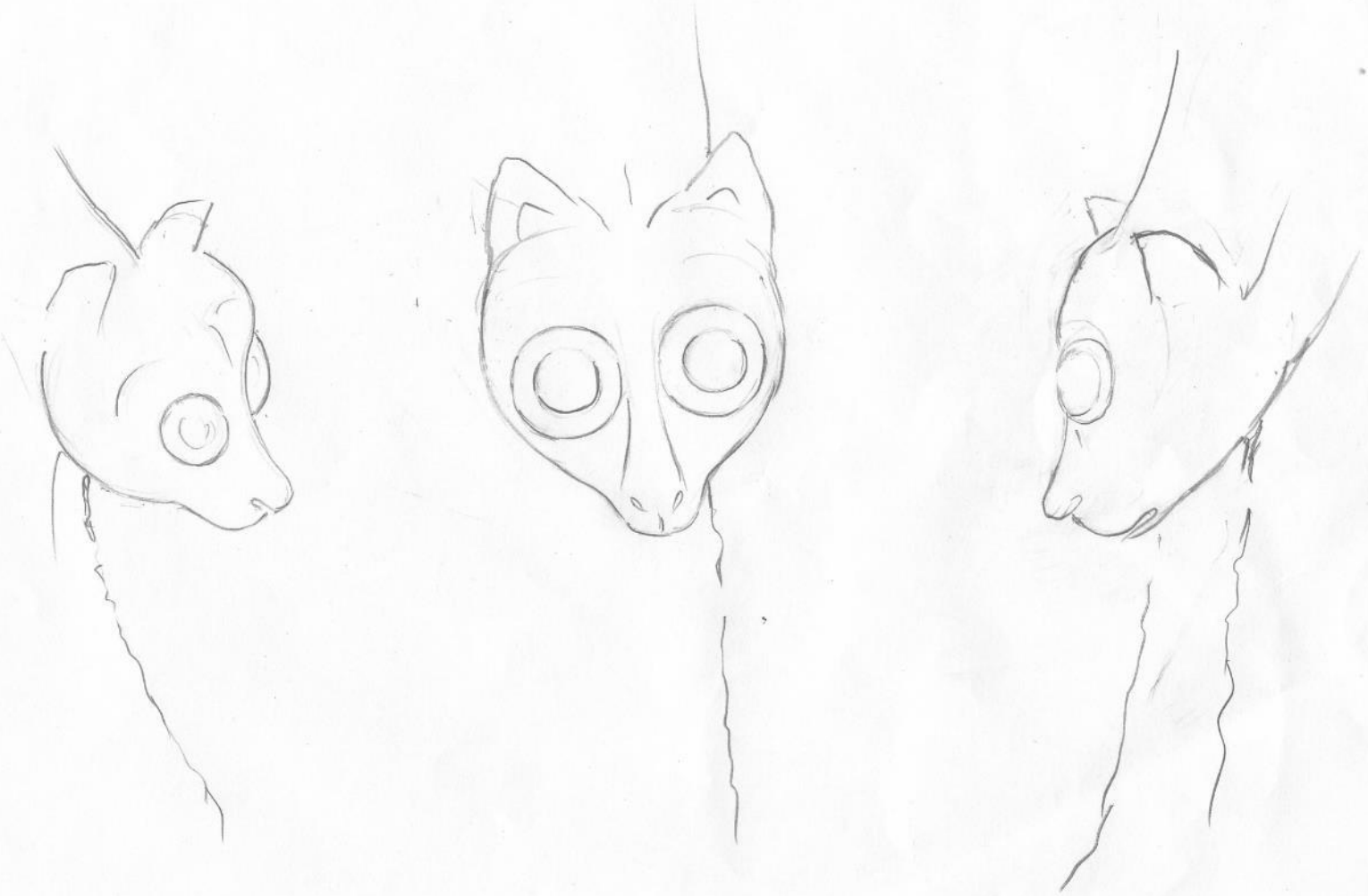






STONE SCULPTURE

Unlike the puristic stone carvings, the art forms produced so far have combined carving with painting to bring out form, texture and natural colours of the creatures depicted. Carvings on boulders and granite pillars have been produced as art forms in their own right or combined with other media to suit a purpose (for example, granite pillars combined with painted wooden planks were found most suitable for directional signage).

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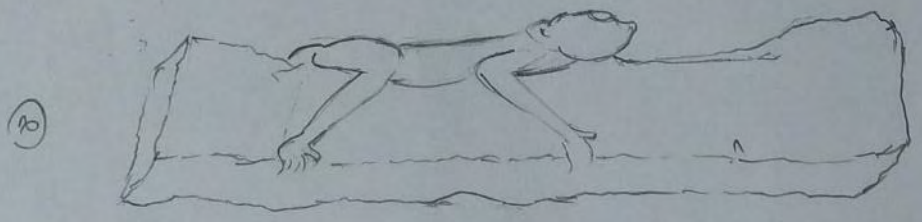
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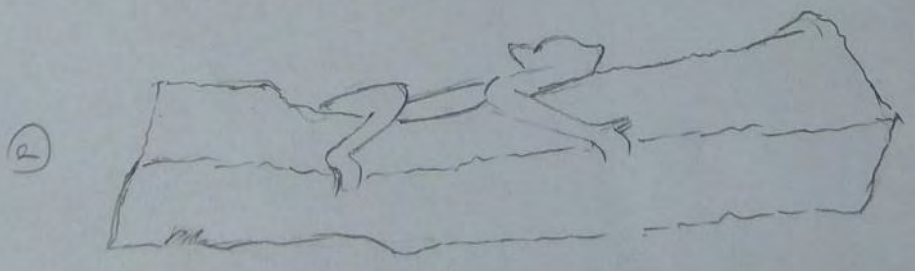
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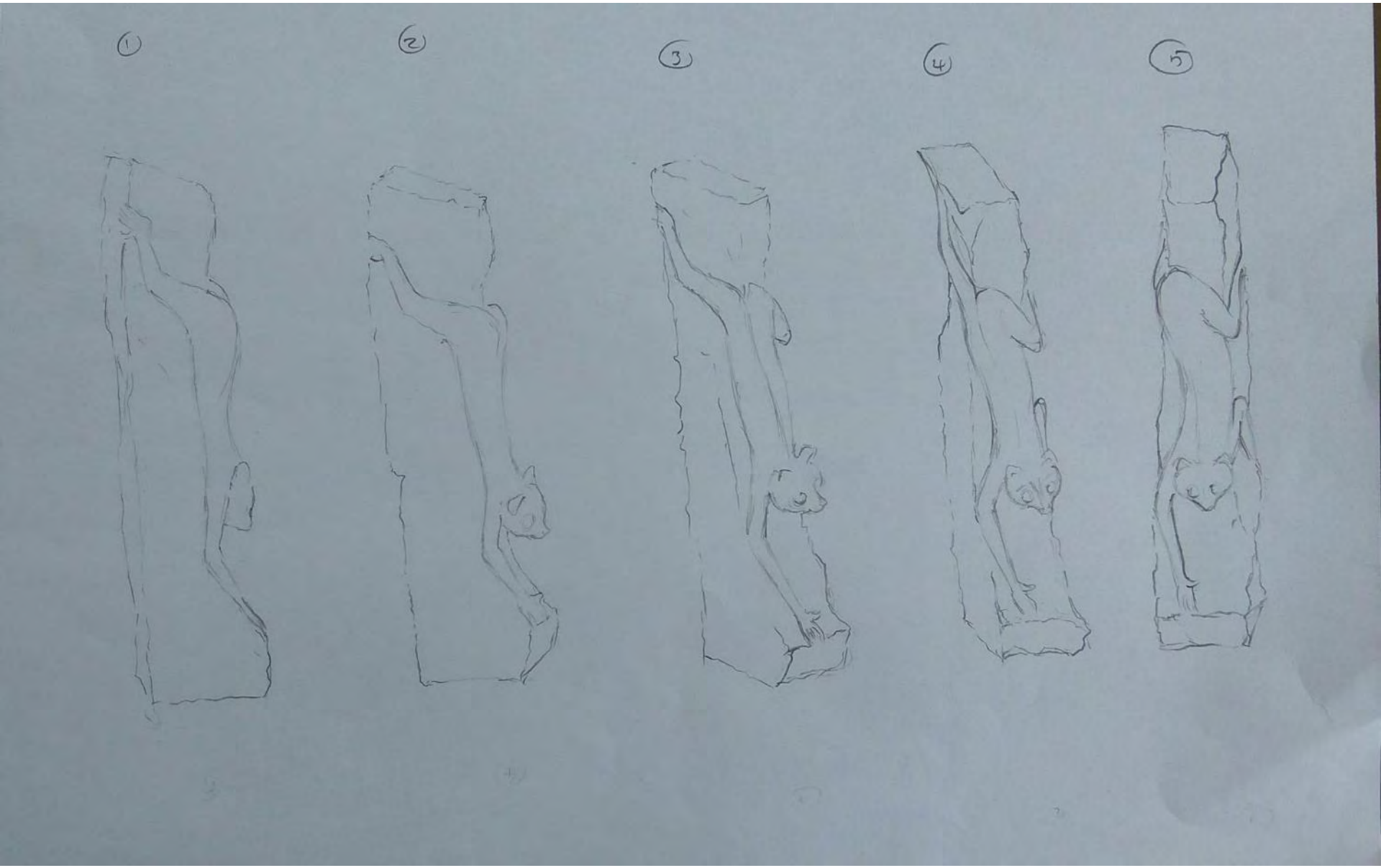
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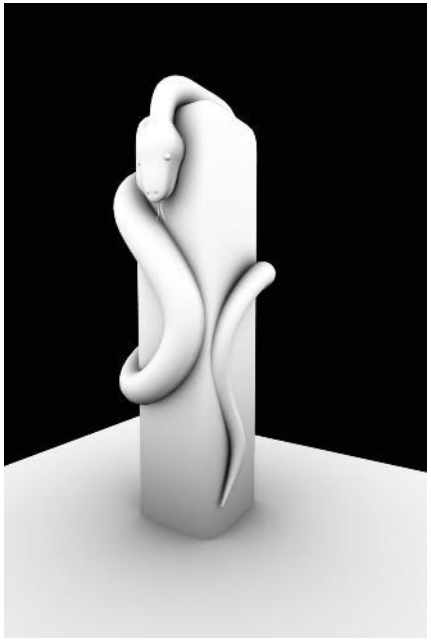
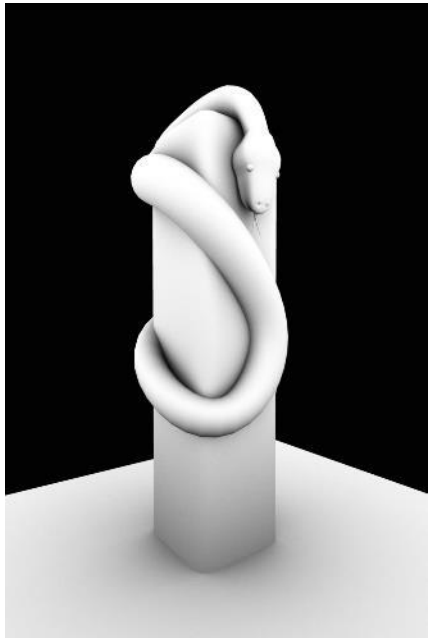
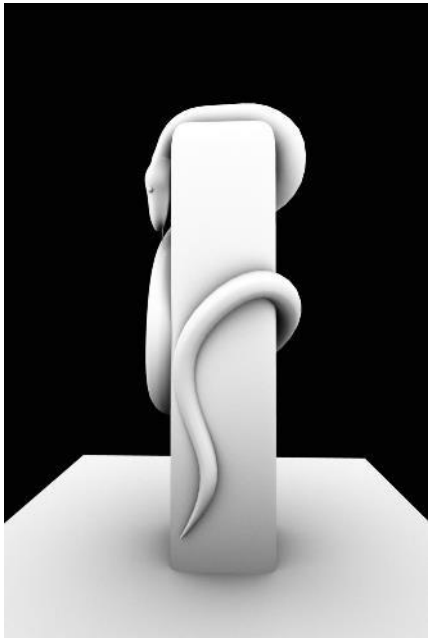
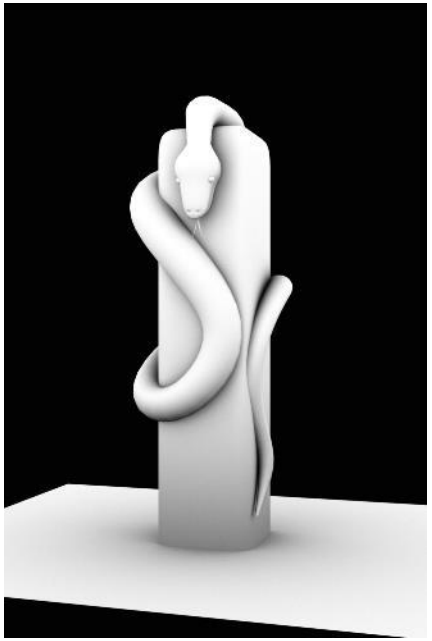






FERRO CEMENT SCULPTURE

Scaled up versions of animals were found to be eye catching and popular. The onus here is strength and durability since most, if not all, sculptures were designed to occupy spaces where they are accessible to the public. Life sized models too have been produced by us and these occupy protected or supervised spaces as vandalism is an all too familiar phenomenon in any place where visitor recreation is also a feature.

Buildup of Ferro cement sculpture










ORIENTAL MAGPIE ROBIN

Steps to loading sculpture up ferro cements models

MOSAIC

Wildlife art is a forum of imagery that will hold one's interest and validate the passion for wildlife but occasionally it has a tendency to push us out of our comfort zone. One such medium that borders on the abstract is mosaic. But unlike the majority of mosaics depicting animals the experiments here have a strong element of realism particularly where form, proportion and colour are concerned. The advantage of mosaic over painting is that it is permanent, though detail cannot be incorporated. Nevertheless, such semi-abstract visual solutions can be useful in conveying graphic information.

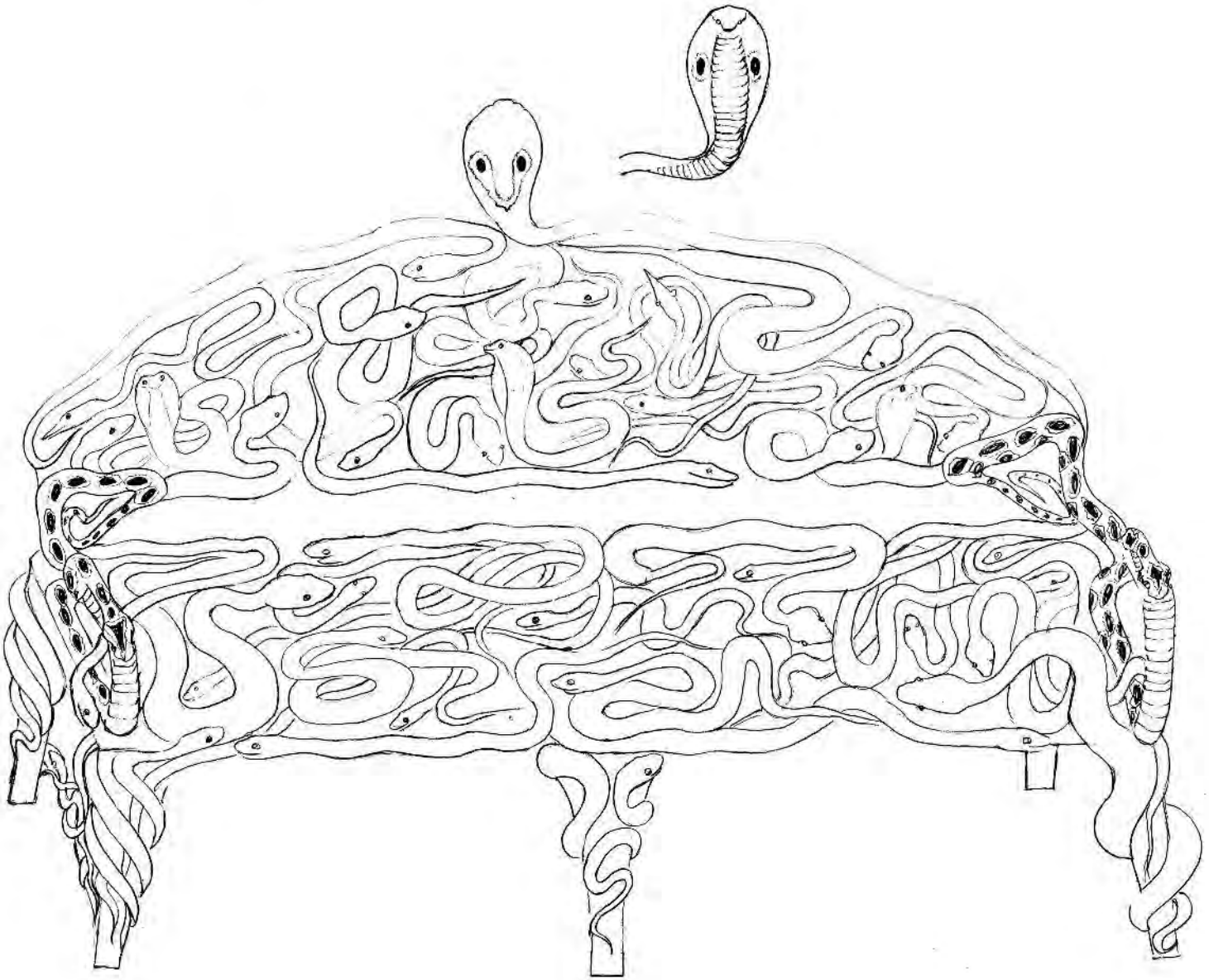
Mosaic

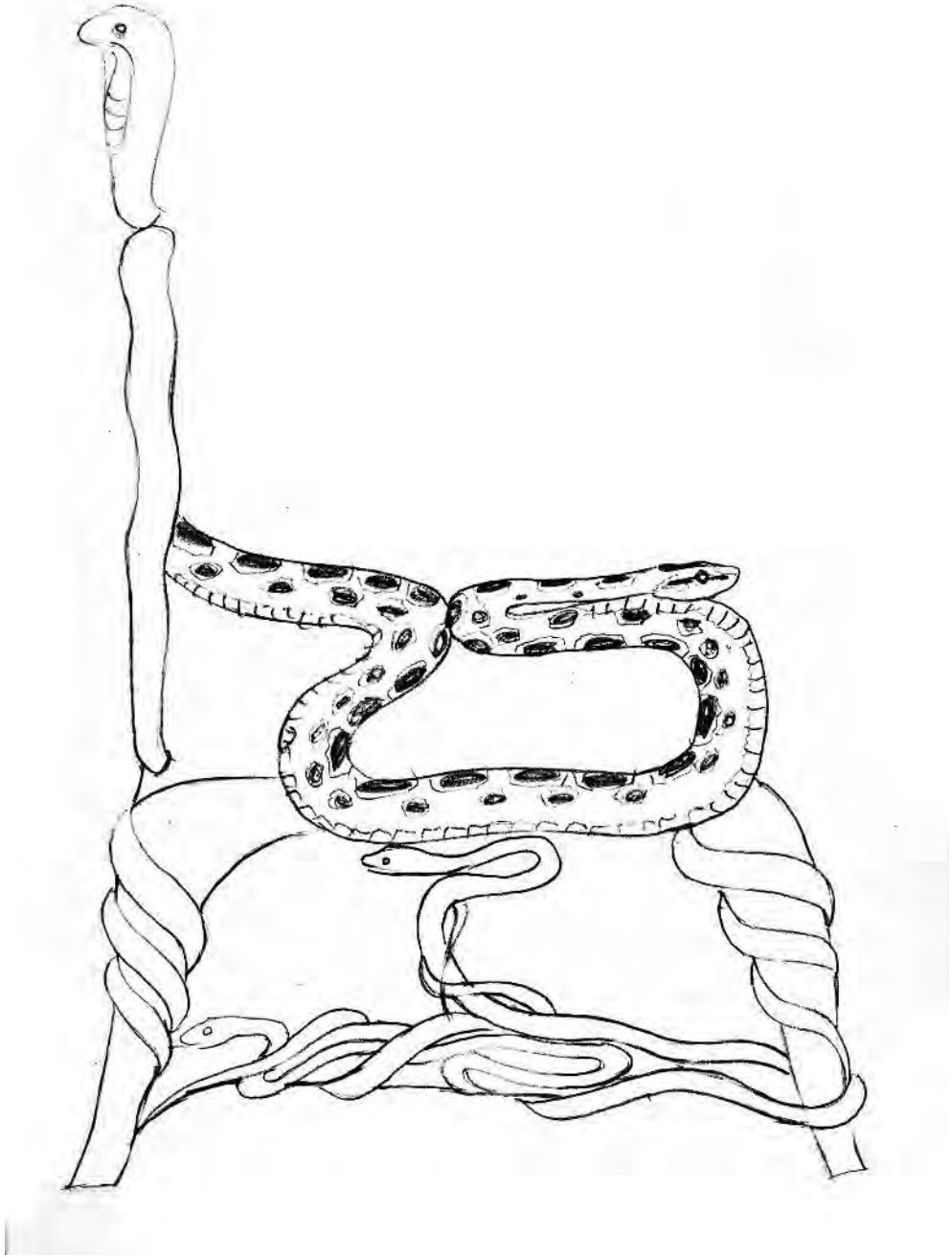
Mosaic on cement blocks

Mosaic on concrete waste

CAST IRON BENCH

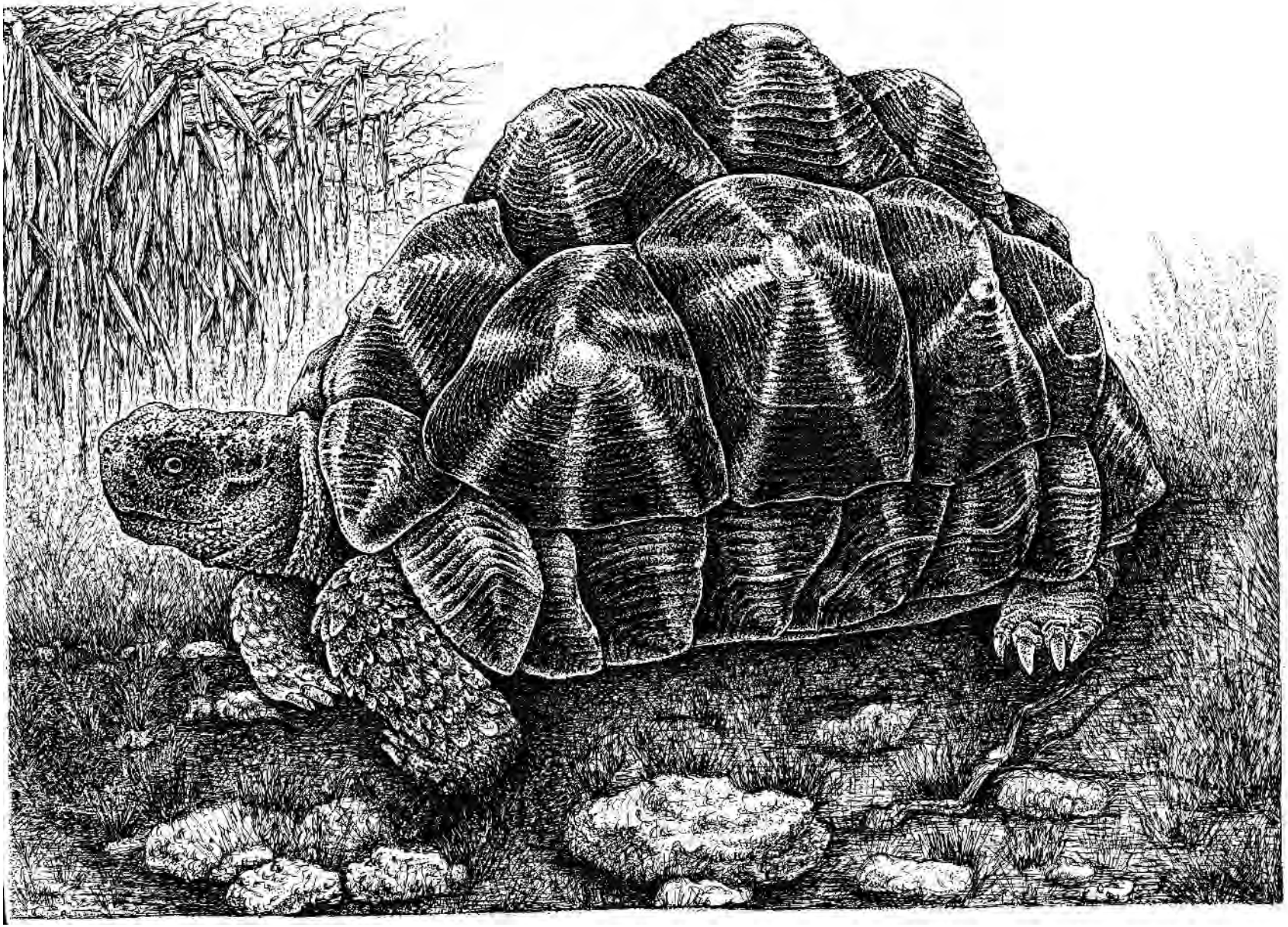
Lethaby mentions that in art “there is a certain mysterious appeal in iron. Iron stands for strength, simplicity, even severity, and, on its sinister side, for cruelty and terror”. The experiments in Pitchandikulam have been limited to date, but it was found that the above comments were quite true concerning strong forms and severity, especially where the so called ‘mysterious and sinister’ creatures like snakes were concerned.





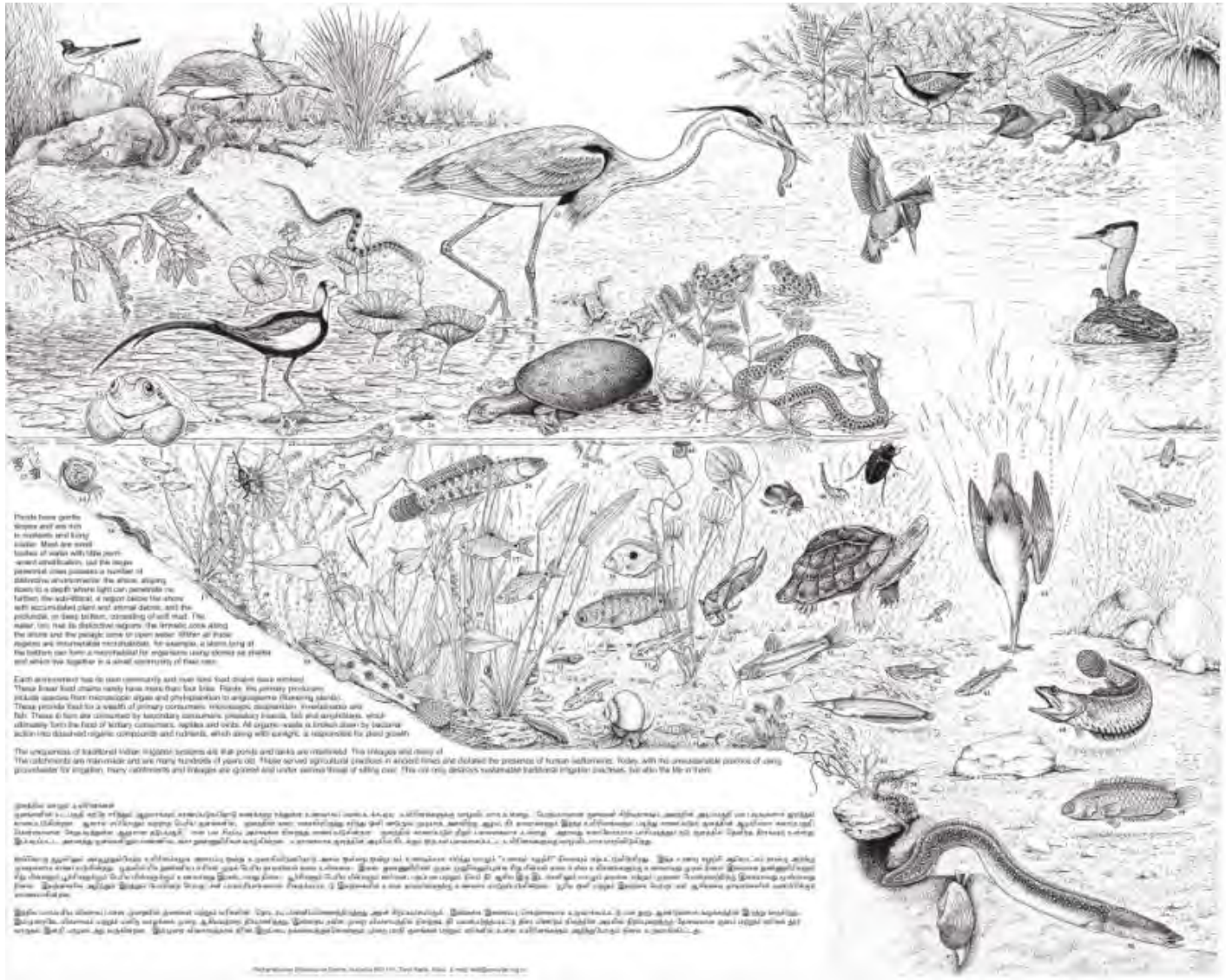
PEN AND INK DRAWING

Illustration for books and posters is one of the specialties of some artists in Pitchandikulam who essentially rely on pointillism, with a trace of hatching and cross hatching (if the design requires it), to manifest outputs.



POSTER ART

It is said that a picture speaks a thousand words, and though photography can capture a moment, art can share an entire experience and is a unique way of seeing and sharing the world (<www. Bbcwildlifemagazine.com/artist2009.esp>). Poster art, perforce being visually striking and designed to attract attention, was found to be one of the best tools for conservation education. The genre of poster art produced was a combination of research poster and classroom poster as the need was to produce a simple 'one image' format that could sensitise people to the biotic wealth of the region as well as be scientifically accurate. Poster art from the time of Toulouse-Lautrec and Cheret had depended on colour but black and white images were also used – for example, the poster publicizing the Exposition Universelle of 1905 at Liege. Both colour and black and white (ink) have been experimented with and the outputs found quite satisfactory.



Ponds have gentle slopes and are rich in nutrients and fairly stable. Most are small bodies of water with little permanent stratification, but the larger perennial ones possess a number of distinctive environments: the littoral, sloping down to a depth where light can penetrate no further; the sub-littoral, a region below the shore with accumulated plant and animal debris; and the profundal, or deep bottom, consisting of soft mud. The water, too, has its distinctive regions - the limnetic zone along the shore and the pelagic zone or open water. Within all these regions are innumerable microhabitats, for example, a stone lying at the bottom can form a microhabitat for organisms using stones as shelter and which live together in a small community of their own.

Each environment has its own community and over-lying food chains have emerged. These linear food chains rarely have more than four links. Plants, the primary producers, include species from microscopic algae and phytoplankton to angiosperms (flowering plants). These provide food for a wealth of primary consumers: microscopic zooplankton, invertebrates and fish. These in turn are consumed by secondary consumers: predatory insects, fish and amphibians, which ultimately form the food of tertiary consumers, reptiles and birds. All organic waste is broken down by bacterial action into dissolved organic compounds and nutrients, which along with sunlight, is responsible for plant growth.

The uniqueness of traditional Indian irrigation systems are that ponds and tanks are interlinked. The villages and many of the catchments are man-made and are many hundreds of years old. These served agricultural practices in ancient times and dictated the presence of human settlements. Today, with the unsustainable practice of using groundwater for irrigation, many catchments and linkages are ignored and under serious threat of silting over. This not only destroys sustainable traditional irrigation practices, but also the life in them.

Madras Crocodile Bank Trust, Post Box No. 4, Mamallapuram 603 104, Tamil Nadu, India. E-mail: mail@crocodilebank.com

POND LIFE

குளத்திலுள்ள உயிரினங்கள்

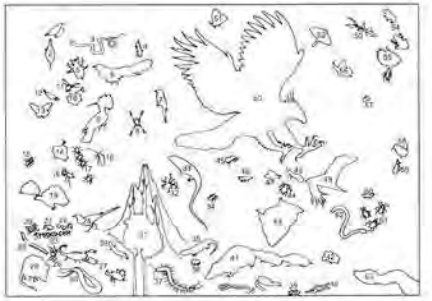
FAUNA OF TROPICAL DRY EVERGREEN FOREST
DOWN ON THE GROUND

Tropical Dry Evergreen Forest (TDEF) is perhaps the most endangered of all India's ecosystems due to its limited range which occupies only about of high population density.

This forest supports a very variety of plant and animal species that coexist with each other to form a highly efficient ecosystem. The nutrient wealth of an evergreen tropical forest is stored within the soil canopy and is maintained by fast and effective nutrient recycling that is dependent upon a variety of ground dwelling animals and invertebrates. Lush and a dense mat of fibrous roots just below the surface of the soil in the humus layer. Each component contributes to the overall efficiency. By ensuring that every exploitable resource is intermeshed within the shortest possible time. This guaranteed that resources are maximized in the system even during the intense monsoon rains.

பசுமை மாறா உலர்வெப்பமண்டலக் காட்டின் விலங்கின வளம்
நிலத்தை சார்ந்திருக்கும் விலங்கினங்கள்

பசுமை மாறா உலர்வெப்பமண்டல காட்டினை பற்றிய தரவு விலங்கின தொகுப்புகளின் முதன்மைத் தேவைகளை உள்ளடக்கிய முழுமையான பண்புகளாகும். பசுமை மாறா வெப்பமண்டல காட்டின் நன்னீர், வளமான இலைகள் அடர்ந்த அதன் கனாப்பகுதியில் வேர்க்கூழ்களை கொண்டுள்ளது. இந்த வேர்கள் மற்றும் மேற்பரப்பு வழியே முழுமையாக செல்கிறதுகின்றது. இந்த செல்களைத் தாங்கி இந்த சமன்களைச் சார்ந்திருக்கும் விலங்குகள், முழுமைக்கான மண்ணுக்கான புழுக்கள் மற்றும் பூச்சிகளை கொண்டுள்ளது. இதன் மூலம் மண்ணில் ஆக்சிஜனை பாதிப்பதற்கும் சேர்வதன் சார்ந்துள்ளது. இந்த முன்னோடி தொழில்நுட்பங்களை சார்ந்து வளங்களின் இருப்பை வெளிப்படுத்தும் காரணமாகிறது. இவை மிகச் சிறிய காலத்தில் சிதைவுகளை சேர்ந்து, சேர்ந்து வழங்கும் செய்வை. தொடர்ச்சியான பருவமழைக் காலத்தில் கூட இந்தத் தொகுப்பின் வளங்கள் நிலைத்திருப்பதை இந்த சூழல்பே நமக்கு சொல்கிறது.



OIL ON CANVAS

Over the years Pitchandikulam has principally concentrated on outdoor art, but of late some artists in Pitchandikulam have begun putting together a collection of paintings for indoor spaces and exhibitions. We wish to state that the efforts shown here are preliminary – basically studies, but in detail, to test our own capabilities and willingness to confirm to studio / exhibition norms. These will be upgraded and combined, with other elements and with inputs from the design team and subject specialists, until a holistically comprehensive set of panels are finally manifested.


R.JohnSon

BRONZE

This, being the most popular metal used for ‘cast metal’ sculpture, could not be ignored and Pitchandikulam has also started experiments in this media. The method used is the ancient ‘lost wax’ method which was used in ancient India for making sculptures of various human and animal figurines, especially with a religious connotation. In this medhod, a model is made of wax, covered with a special type of clay and heated so that the clay melts and runs out of a hole specially left for that purpose, leaving an empty core. Molten metal is then poured into the empty space, left to cool and the clay shell broken to reveal the basic form. Fine detail is added using more molten metal and a series of tools to give the final finished product.

INDUSTRIAL PLASTICINE OR CLAY

Clay is the most favoured media of sculptors concentrating on ‘add on’ techniques because this can give a refined and true to life look than any other three dimensional media. Pitchandikulam has begun experimenting in the modern derivative of this media and the preliminary results found very satisfactory.

PROJECTS

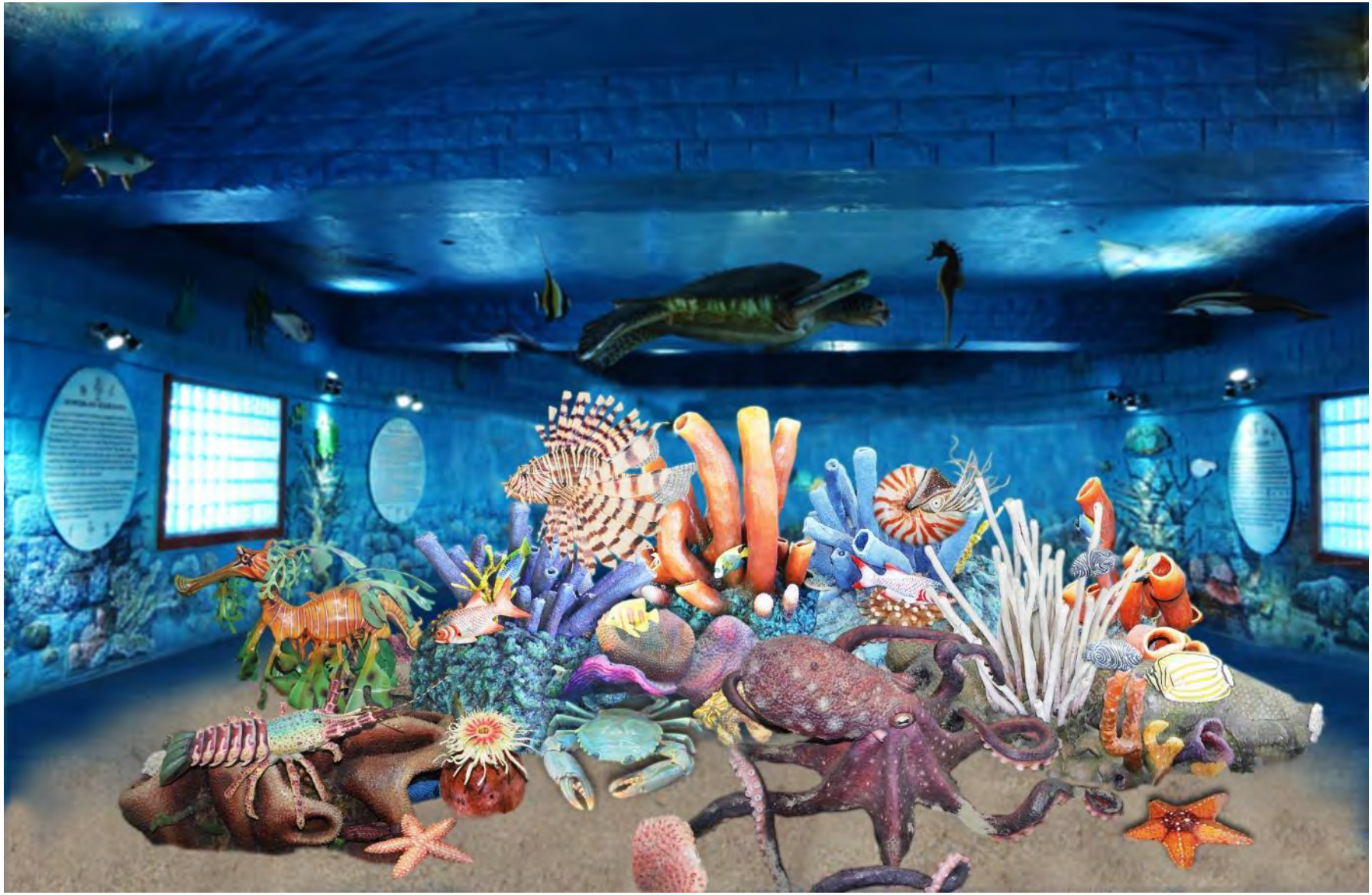
ADYAR ECO- PARK,
CHENNAI, TAMIL NADU

This was a prestigious Government of Tamil Nadu undertaking which principally focused on wetland restoration. As education was envisaged to play a crucial role in the process, educative signage, models, etc were commissioned and developed. The total bill of quantity budget for these artworks alone exceeded Rs 1.9 crore and this has remained our largest undertaking to date.


அடையாறு சுற்றுச்சூழல் பூங்கா
மாண்புமிகு தமிழ்நாடு முதலமைச்சர்
கலைஞர். மு.கருணாநிதி
அவர்களால் திறந்து வைக்கப்பட்டது
தலைமை
மாண்புமிகு துணை முதலமைச்சர்
திரு.மு.க.ஸ்டாலின் அவர்கள்
முன்னிலை
வணக்கத்திற்குரிய சென்னை மாநகர மேயர்
திரு.மா.சுப்பிரமணியன் அவர்கள்
நாள்: 22.01.2011
Adyar Eco-Park
Inaugurated by
Kalaignar M.Karunanidhi
Hon'ble Chief Minister of Tamil Nadu
Presided by
Thiru.M.K.Stalin
Hon'ble Deputy Chief Minister
In the Presence of
Thiru.M.Subramaniyan
Worshipful Mayor of Chennai
On 22.01.2011.

MARINE INTERPRETATION CENTRE, KUNDAKAL (NEAR RAMESWARAM)

This was a joint UNDP and Gulf of Mannar Biosphere Reserve Trust (GoMBRT) undertaking. The concept was essentially that when one entered the building the atmosphere should be almost as if one was underwater. The highlight of the whole exercise was a three dimensional 18 ft x 9 ft model of a coral reef with hundreds of associated life forms.



WIPRO TECHNOLOGIES
ELECTRONIC CITY
BANGALORE

It was heartening to collaborate with ATREE on this project which was essentially to enhance landscape features of a butterfly garden with art as well as to sensitize people about butterfly life. This involved confluent paintings on large granite slabs and stone sculpture.


BUTTERFLY DIVERSITY
POLLINATORS

SNAKE PARK
CHENNAI

This project involved the creation of life sized models of various snakes and lizards.

TOLL PLAZAS ALONG THE ECR FROM CHENNAI TO PONDICHERRY

Eye catching paintings of local wildlife on Kadappa stone were erected at both tool gates between Chennai and Puducherry. Some of the paintings have been reduced to a sorry state since they have not been repainted since they were erected 9 years ago. There is a point we would like to make: if artworks are left out in direct sunlight the colours will fade and repainting will have to be undertaken every three years or so.

NILGIRI BIOSPHERE RESERVE PARK, ANAIKATTI (NEAR COIMBATORE)

This is an eco-park that is visited by many tourists and school groups. Sensitizing them to wildlife is an essential part and in this context some paintings and models were developed which enhanced both conservation education and recreation.

GASS FOREST MUSEUM, COIMBATORE

This is one of the oldest museums in the country. The job was to refurbish the museum and give it a more aesthetic look without compromising the collections already existing in the museum. The work needed quite a bit of ingenuity and involved creation of life size sculptures of large animals, interpretative signage, indoor landscaping, refurbishing of antique furniture and models, and the cleaning and remounting of the hundreds of animal trophies and skins contained in the collection. The highlight of the exhibition space is a three dimensional diorama approximately 25m x 3m depicting a rocky forest landscape replete with sculptures of a Tiger, a family of Lion-tailed Macaques, an Indian Python swallowing a Spotted Deer, a King Cobra, Ficus Tree and innumerable other minor items. Even the stuffed Gaur presented by the Maharaja of Mysore and a few other fully stuffed specimens were used to give a realistic feel to the exhibit.


THE WONDERS OF FOSSILS
AND PETRIFIED WOOD

SNAKE INTERPRETATION CENTRE, DEPARTMENT OF FORESTS AND WILDLIFE, PUDUCHERRY

This involved showcasing the four common venomous snakes of peninsular India (Spectacled Cobra, Indian Krait, Russell's Viper and Saw-scaled Viper) and their mimics for the education of the general public.

It involved life sized sculptures of nine snakes for an outdoor public space in addition to interpretative signage


29/06/2015 16:22

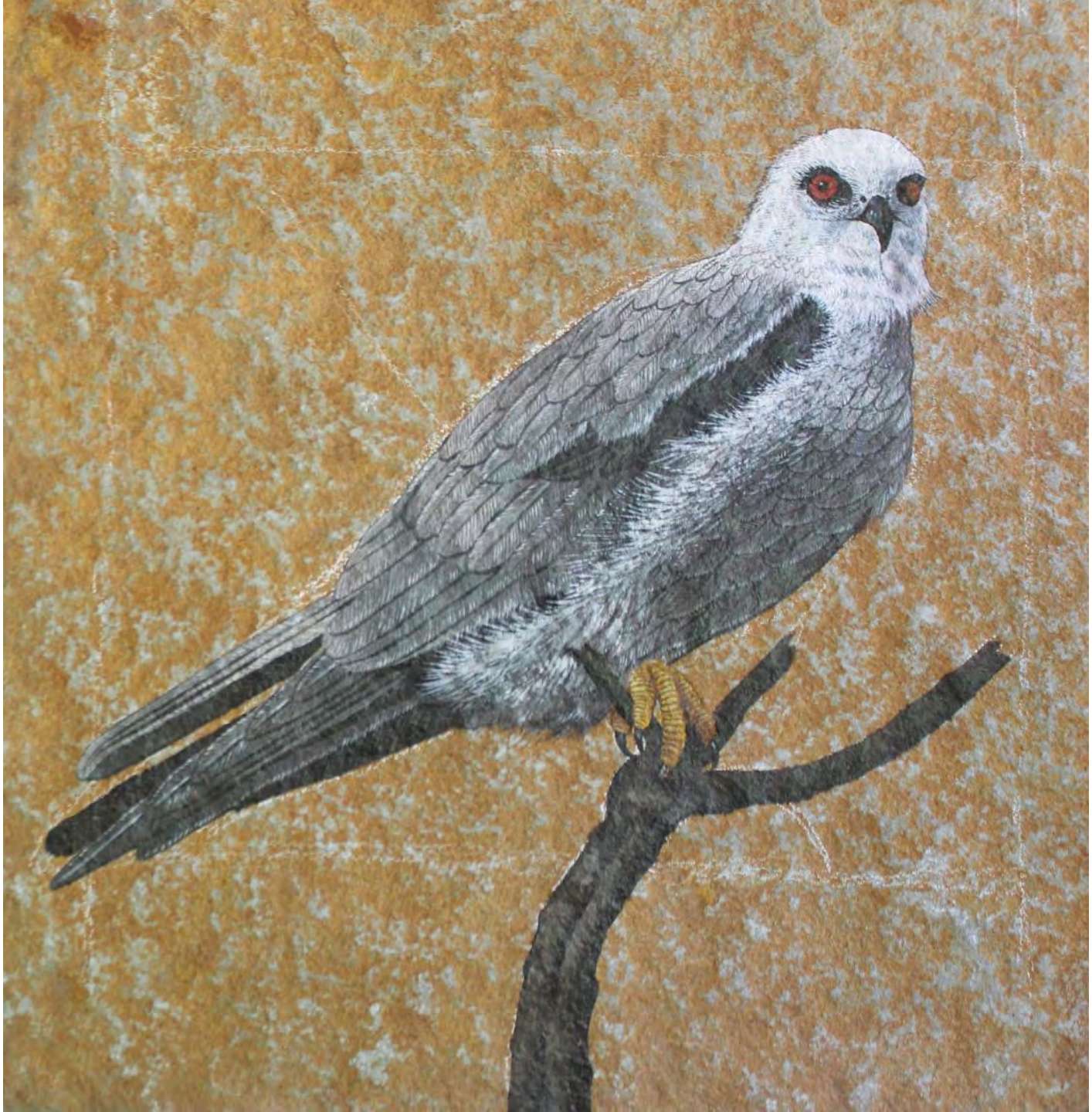

29/06/2015 16:18


29/06/2015 16:17

CHETPET ECO PARK

This was a project initiated by the Fisheries Department and PFC was contracted to create both the Master Plan as well as sculptures.

K RESORTS
EAST COAST ROAD



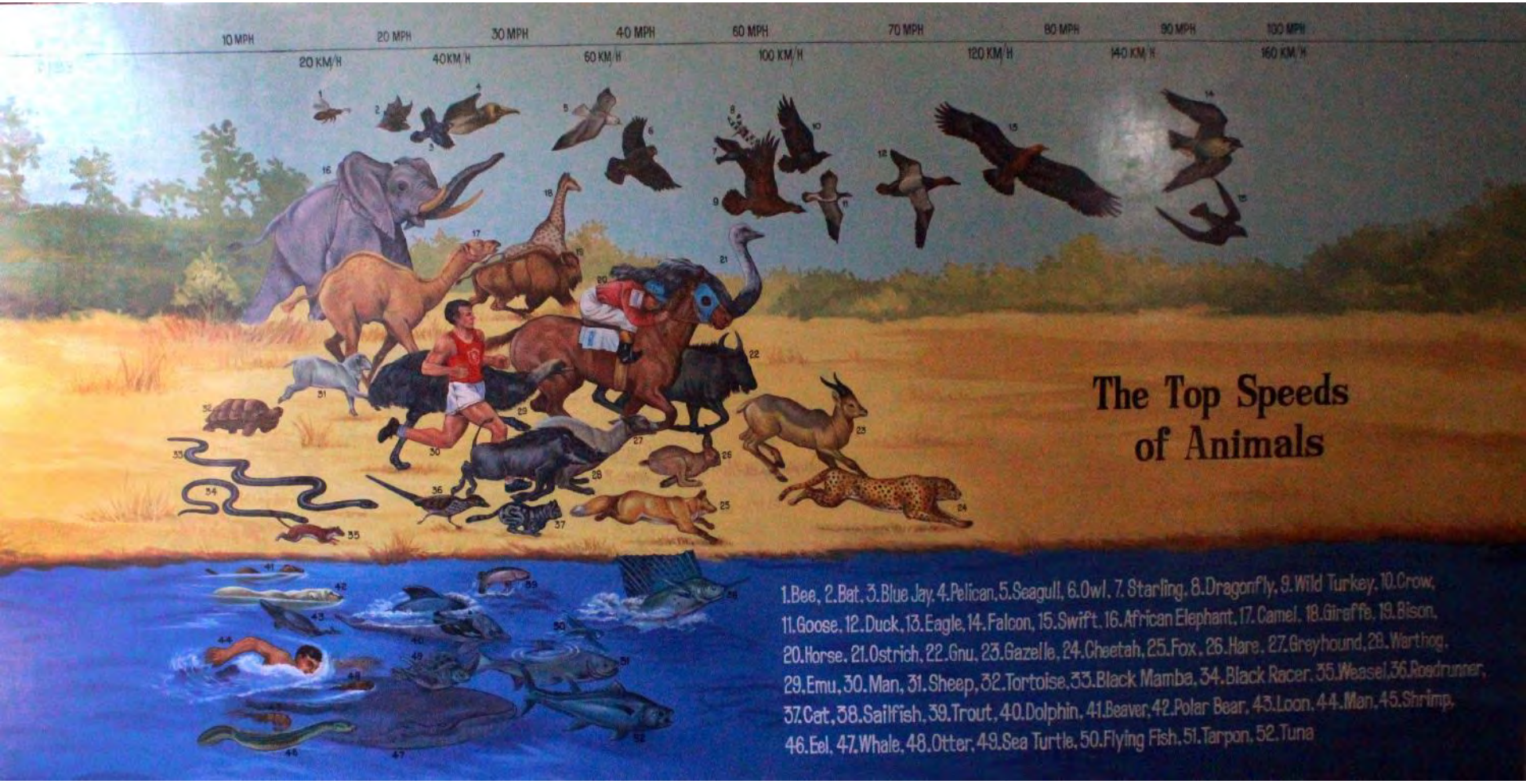
PICHAVARAM MANGROVE INTERPRETATION CENTRE

An undertaking under the Tamil Nadu Forest Department. It involved a small building with interpretative signage, models and a replication of a mangrove ecosystem. A brochure was also designed and printed.


Golden jackal
Canis aureus

DJ ACADEMY
COIMBATORE

GOOD EARTH BANGALORE


10 MPH
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100 KM/H
120 KM/H
140 KM/H
160 KM/H
The Top Speeds of Animals
1.Bee, 2.Bat, 3.Blue Jay, 4.Pelican, 5.Seagull, 6.Owl, 7.Starling, 8.Dragonfly, 9.Wild Turkey, 10.Crow, 11.Goose, 12.Duck, 13.Eagle, 14.Falcon, 15.Swift, 16.African Elephant, 17.Camel, 18.Giraffe, 19.Bison, 20.Horse, 21.Ostrich, 22.Gnu, 23.Gazelle, 24.Cheetah, 25.Fox, 26.Hare, 27.Greyhound, 28.Warthog, 29.Emu, 30.Man, 31.Sheep, 32.Tortoise, 33.Black Mamba, 34.Black Racer, 35.Weasel, 36.Roadrunner, 37.Cat, 38.Sailfish, 39.Trout, 40.Dolphin, 41.Beaver, 42.Polar Bear, 43.Loon, 44.Man, 45.Shrimp, 46.Eel, 47.Whale, 48.Otter, 49.Sea Turtle, 50.Flying Fish, 51.Tarpon, 52.Tuna

VISITORS' CENTRE AUROVILLE

AUROVILLE'S ECOSYSTEM

- Auroville is much more than an experiment in human unity, a place for research into sustainable living and a universal township in the making. It's a highly complex web of life, involving not just the humans from many nations, cultures and backgrounds who live here and participate in its growth and development, but all the species of the plant and animal kingdoms - from the giant banyan trees down to the micro-organisms of the soil, air and water - that make up the eco-systems and share the biosphere. All are inter-related, all ultimately dependent on each other, all sustaining each other as they move forward and evolve towards the next stage in terrestrial evolution, together.
- Some of the elements of this complex mix of life-forms have been here for millions of years. Others, like the local villagers and their livestock, for perhaps millennia. Yet others are more recent arrivals, especially the humans comprising today's mix of Aurovilians, as also the various species of animals, birds, insects, trees and plants which have taken up residence since Auroville began, the latter in some cases returning after a long interval, others apparently coming for the first time, never seen before in this area in living memory.
- This is Auroville today, but we should not forget the many species also yet to come, from the vast resources of nature, representatives of a future planet Earth where in all life forms will live in symbiosis, consciously or unconsciously dependent on and supportive of each other, species for which Auroville wants to create a sanctuary.

THE GREENING OF A WASTELAND

Two hundred years ago Auroville and its environs was covered in forests and there is evidence that there were tigers and elephants. In 1825 British, and later French, policies promoted deforestation: plots of land were awarded to people to clear and farm as wood was needed to build cities and for exportation. Much of the cleared land was later left to erode and in less than two hundred years a rich forest was turned into an expanse of baked earth scarred with gullies and ravines.

Rusty-spotted Cat: A species of wild cat discovered in 1831 from the region and documented here again in 2016 after a gap of 185 years

In the late 60's and early 70's the pioneers of Auroville gained a foothold on this damaged land. They had no choice: they planted and they dug, an uncomplicated approach which was refined over the years and which has made Auroville what it is today, a land of pleasant and verdant green. At the beginning young seedlings had to be protected from grazing livestock and raised bunds and check dams were created to help retain the topsoil and prevent monsoon rains from washing it away into the sea.

Upon entering Auroville today one can only get a vague idea of what the land used to look like. The trees, cool air and rich biodiversity are testament to the fact that over two million trees have been planted since 1968 setting in motion natural self regeneration.

MS SWAMINATHAN RESEARCH FOUNDATION VEDRANYAM


உலர்ந்தநில பசுமை
ருத் தாவரங்கள்
TROPICAL DR
N FOREST

MINOR PROJECTS

These principally involved painting on Kadapa stone slabs / marine plywood

Anna Nagar Park, Chennai

Marina Beach, Chennai (these have been removed)

Otteri Park, Chennai

Crocodile Bank, Vadanemmeli (near Mammalapuram)

Visitors' Centre, Auroville

Botanical Garden, Auroville

Children's Park, Puducherry

Wild Orchid Resorts, Yercaud

Snake Interpretation, Puducherry Forest Dept.

And many private commissions

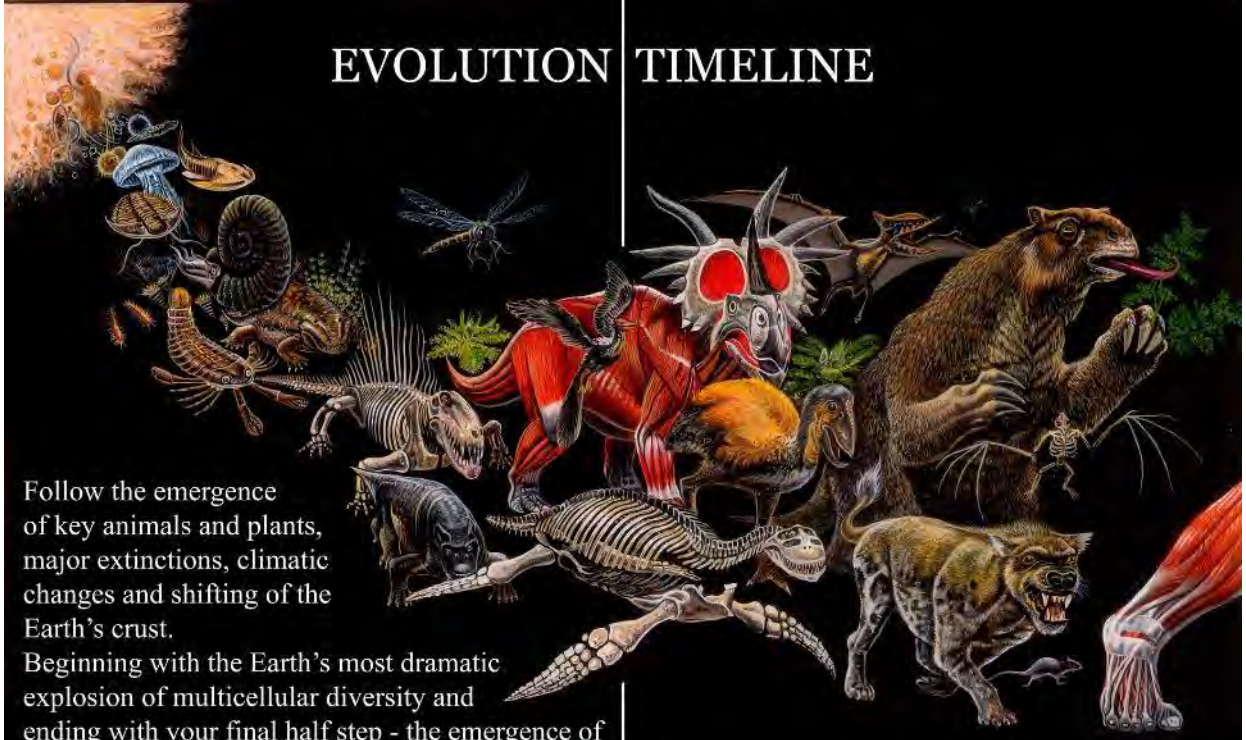
Working at Art Department

ONGOING PROJECT

Toyota Kirloskar Motors, Bidadi, Mysore – Bangalore Highway

This is a major project for a 25 acre eco zone on the Toyota Kirloskar Motors campus. PFC has undertaken the artworks for the park.

EVOLUTION TIMELINE

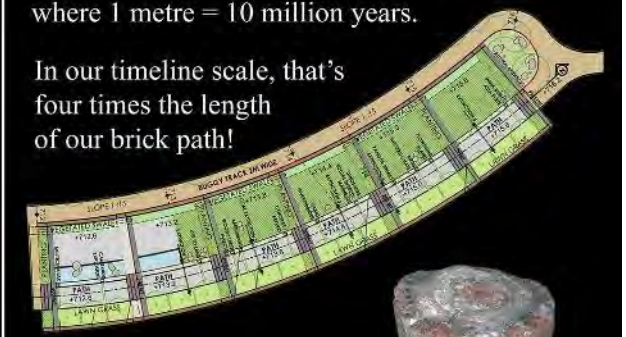


Follow the emergence of key animals and plants, major extinctions, climatic changes and shifting of the Earth's crust.
Beginning with the Earth's most dramatic explosion of multicellular diversity and ending with your final half step - the emergence of early Hominids leaving their life in the trees to walk on two feet.

Explore the extraordinary story of complex life on Earth along this 60 metre brick path - The last 600 million years of evolution.

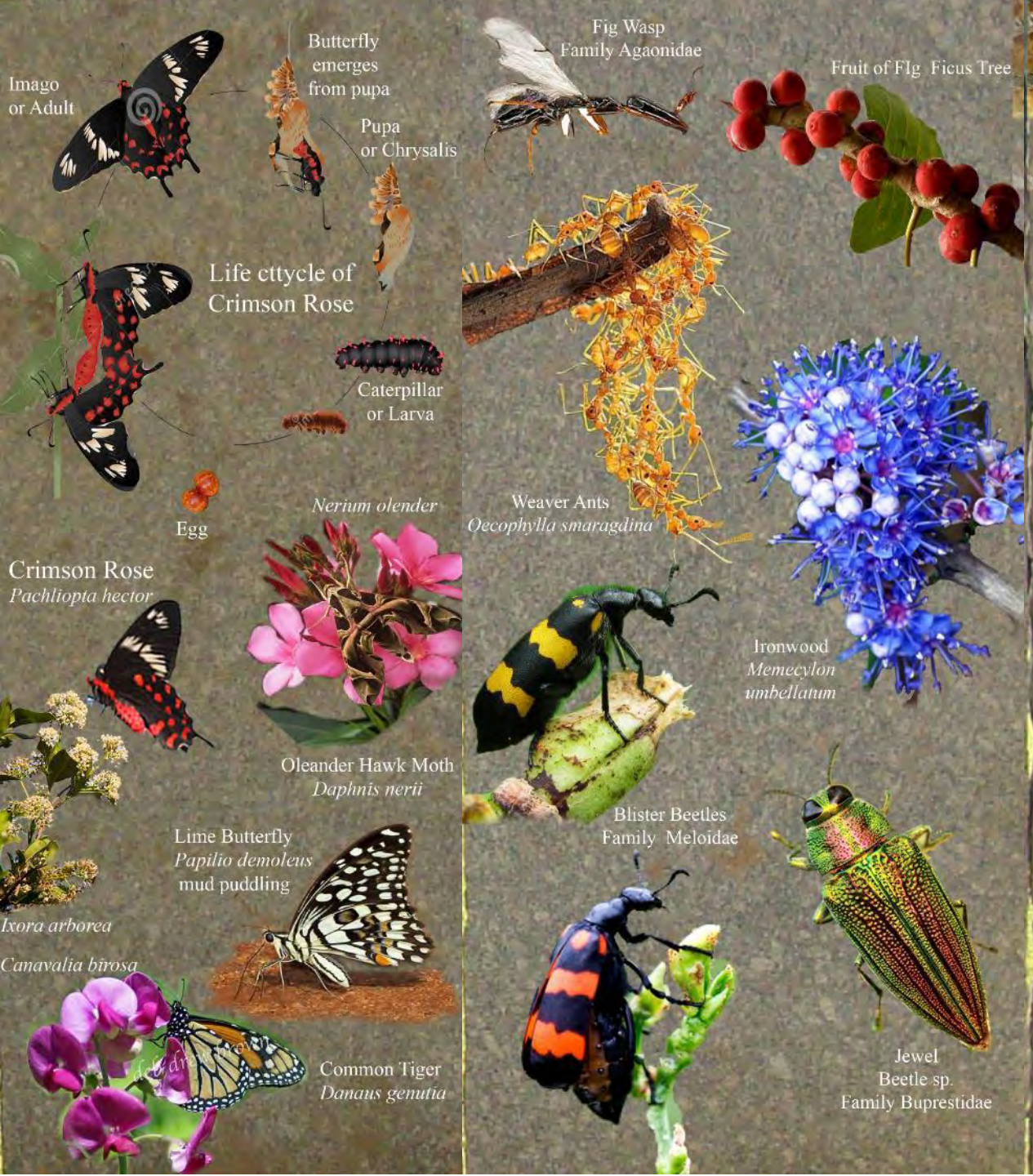
This timeline is made to a scale where 1 metre = 10 million years.

In our timeline scale, that's four times the length of our brick path!



Bangalore is an ancient land. The granite stones used for these slabs and pillars are around 205 billion years old. They were formed around the time when the first oxygen giving bacteria (Cyanobacteria) appears on earth.

FICUS SPECIES AND THEIR BIODIVERSITY


Imago
or Adult
Butterfly
emerges
from pupa
Pupa
or Chrysalis
Life cttycle of
Crimson Rose
Caterpillar
or Larva
Egg
Nerium olender
Crimson Rose
Pachliopta hector
Oleander Hawk Moth
Daphnis nerii
Lime Butterfly
Papilio demoleus
mud puddling
Ixora arborea
Canavalia birosa
Common Tiger
Danaus genutia
Fig Wasp
Family Agaonidae
Fruit of FIg Ficus Tree
Weaver Ants
Oecophylla smaragdina
Ironwood
Memecylon
umbellatum
Blister Beetles
Family Meloidae
Jewel
Beetle sp.
Family Buprestidae
Rock Bee
Apis dorsata
Touch-me-not
Mimosa pudica
Indian Honey Bee
Apis cerana indica
Little Bee
Apis florea
Carpenter Bee
Xylocopa sp.


Butterfly
emerges
from pupa
Imago
or Adult
Pupa
or Chrysalis
Life Cycle of
Crimson Rose
Caterpillar
or Larva
Nerium oleander
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Oleander Hawk Moth
Daphnis nerii
Ixora arborea
Catharanthus roseus
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Danaus genutia

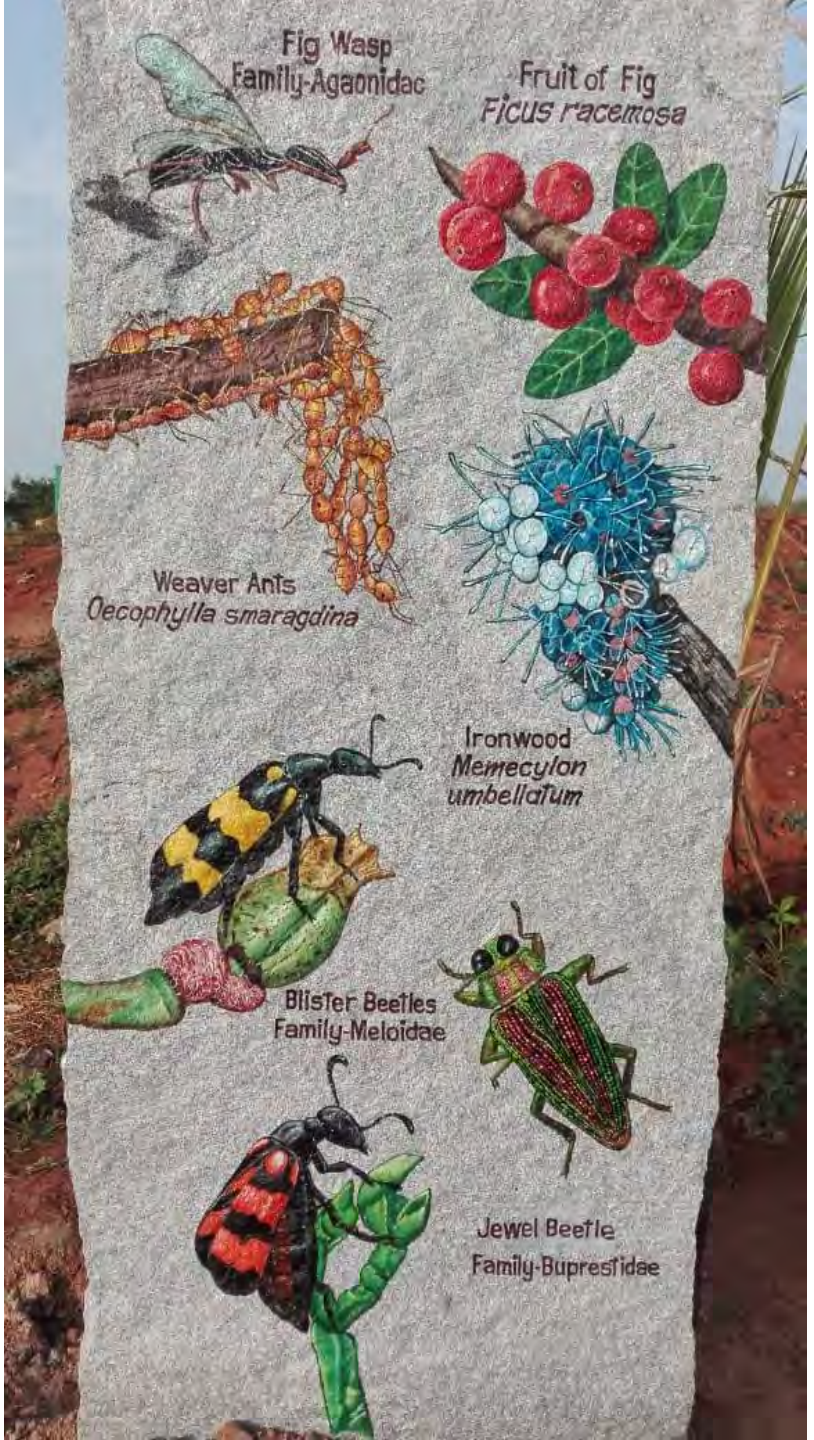
Fig Wasp
Family-Agaonidae
Fruit of Fig
Ficus racemosa
Weaver Ants
Oecophylla smaragdina
Ironwood
Memecylon
umbellatum
Blister Beetles
Family-Meloidae
Jewel Beetle
Family-Buprestidae


Rock Bee
Apis dorsata
Touch-me-not
Mimosa pudica
Indian Honey Bee
Apis cerana indica
Little Bee
Apis Florea
Carpenter Bee
Xylocopidae


Flame of the forest
Butea monosperma
Purple-rumped Sunbird
Leptocoma zeylonica
Thick-billed Flower Packer
Pachyglossa agile
Crown flower
Calotropis gigantea
Jerdon's Leafbird
Chloropsis jerdoni
Bullet Wood
Mimusops elengi
Short-nosed Fruit Bat
Chnopterus brachyotis
Rose-ringed Parakeet
Psittacula krameri
Banyan Tree
Ficus bengalensis


425 Million Years ago
Life moves on land
Billions of years of barren muddy Earth are over.
Oxygen in the atmosphere allows plants to colonise the land.
Plants evolve from blue-green algae on the edges of fresh water lakes.
With no animals yet on land, the Earth is quiet and still. Vascular plants evolve internal plumbing and thick cell walls to adapt to dry land.
Predation: fish with jaws, sharks and sea scorpions evolve.


4 Million Years ago
Hominids
The Earth is now dryer with less forest. Primates in Africa adapt to scrubland and grassland ecosystems. Australopithecus afarensis begins to walk upright to help in detecting predators and prey in grassland.
2-3 Million Years ago
Ice Age begins
Larger brain, meat based diet. Skilled hunting with weapons and tool making, along with long distance running.
1 Million Years ago
Discovery of Fire. Complex social development.

THANK YOU