

Calendar 2020

# *Indian Insects*

## *Welcome To The Bug's World*

*Will you agree if we say..insects are our immediate competitors in the survival race on this planet! They want the food we eat, places where we live, clothes that we wear, books that we read and so much so they are after our blood too! We, therefore chose to dedicate this year's calendar on Insects. Not only that we need to understand our competitors closely but also they are highly misunderstood group among the animal kingdom. We hope this calendar will help you unravel the mysterious world of insects*

*We also hope you will find it interesting to read about our last year's journey of Ladybird Environmental Consulting and iNaturewatch Foundation. We would like to acknowledge the year long support extended by our clients, partners, vendors volunteers and well wishers. A big 'Thank You' to you all.*

*On behalf of our entire team, we wish you, your colleagues and family a 'Happy & Green New Year'*

*Team Ladybird & iNaturewatch*



## Our Foot Print



-  Activities of iNaturewatch Foundation
-  Activities of Ladybird Environmental Consulting
-  Moth Book Orders of Birdwing Publishers



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# JANUARY 2020

S		12	26
M		13	27
T		14	28
W	1	15	29
T	2	16	30
F	3	17	31
S	4	18	
S	5	19	
M	6	20	
T	7	21	
W	8	22	
T	9	23	
F	10	24	
S	11	25	

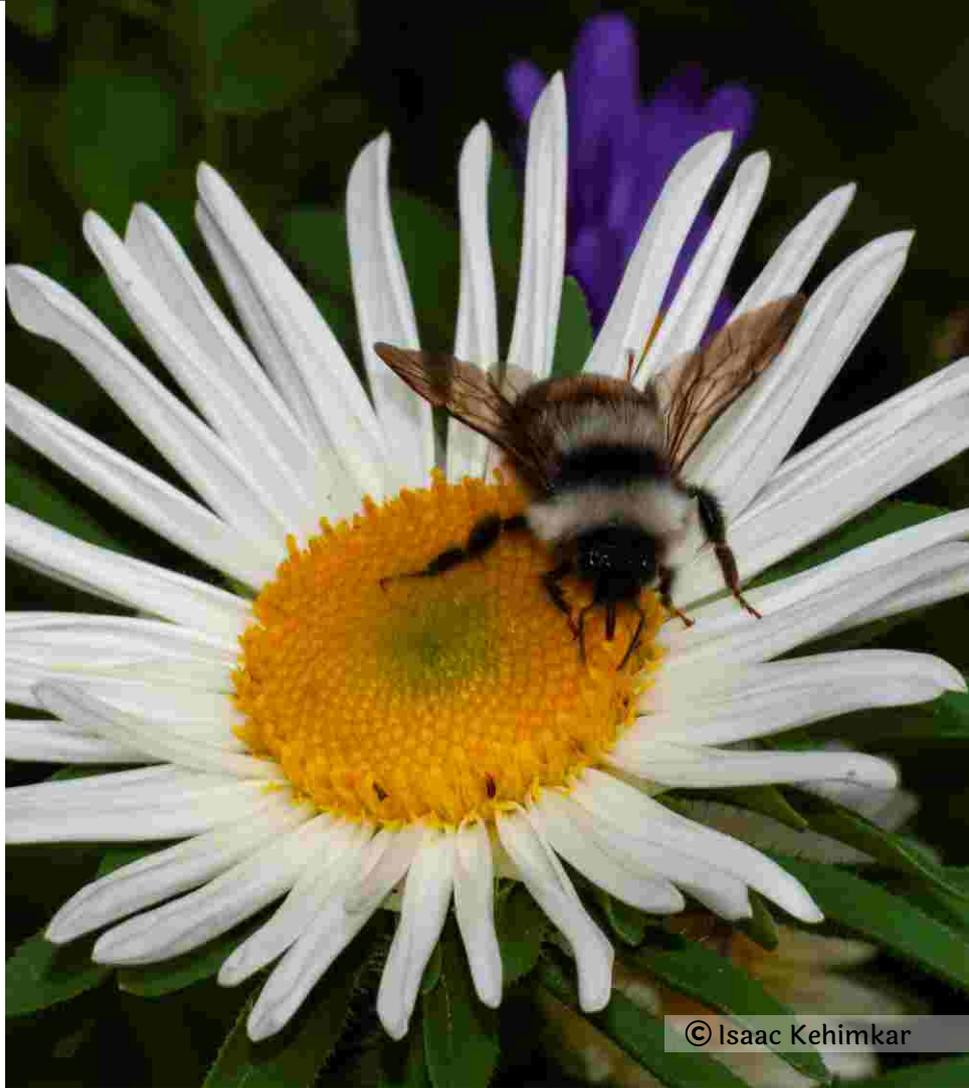
#### Public Holidays

26 Jan - Republic Day

15 Jan - Makar Sankranti / Pongal

#### Eco-Days

14-30 Jan - Animal Fortnight



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## BUMBLE BEE – *The Pollinator from Hills*

A high altitude large bee with fuzzy body, short and stubby wing. They are popularly known for their buzz pollination. They are more effective & efficient pollinators in comparison to other bees. Their wings beat 130 times or more per second, and the beating combined with their large bodies vibrates flowers until they release pollen, which is called buzz pollination. Buzz pollination helps plants produce more fruit.

# Last Year Memory

15 Jan 2019 :  
Mangrove Walk for  
SIES College, Nerul



21 Jan 2019 :  
Boat Ride for  
Flamingo Boat Safari



24 Jan 2019 :  
Lecture on Mangroves,  
Swami Vivekananda  
College, Navi Mumbai



24 Jan 2019 :  
At Mangrove Centre,  
Airoli with SIES School,  
Bhandup



# FEBRUARY 2020

S		9	23
M		10	24
T		11	25
W		12	26
T		13	27
F		14	28
S	1	15	29
S	2	16	
M	3	17	
T	4	18	
W	5	19	
T	6	20	
F	7	21	
S	8	22	

Public Holidays  
21 Feb - Mahashivratri

Eco-Days  
2 Feb - World Wetlands Day



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## HOVERFLY – *The Pollinator Fly*

Adult hover flies are important pollinators and can be found feeding at flower blossoms or around aphid colonies, where they lay their eggs. The baby hover flies are important predators of pests, such as aphids, scales, thrips and caterpillars. They are rivalled only by ladybird beetles and lacewings

## *Last Year Memory*

2 Feb 2019:  
Lake Safari,  
Nizampet Lake, Hyderabad



6 Feb 2019:  
Selected as Mentor for Alumni  
Mentorship Programme  
for Youth Leaders, U.S. Embassy



15 Feb 2019:  
Tree Plantation at Nizampet Lake  
by DCB Bank, Hyderabad



18 Feb 2019:  
Development of Signage for Lake Education,  
Nizampet Lake, Hyderabad for Wells Fargo  
India Solutions Pvt Ltd.

# MARCH 2020

S		8	22
M		9	23
T		10	24
W		11	25
T		12	26
F		13	27
S		14	28
S	1	15	29
M	2	16	30
T	3	17	31
W	4	18	
T	5	19	
F	6	20	
S	7	21	

## Public Holidays

10 March - Holi

25 March - Ugadi / Gudi Padwa

## Eco-Days

3 March - World Wildlife Day

9 March - Solar Appreciation Day

20 March - World Sparrow Day

21 March - World Forestry/Planting Day

22 March - World Water Day



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## ANTLION – *The Pit Driller*

Antlions are frail looking insects with long transparent wing like damselflies, but differ in having clubbed antennae. The lifestyle of the antlion baby is more interesting. The larva digs out with its head to create a funnel-shaped pit, and it sits at the bottom of the pit. When an ant or any other insect slips into the pit, it is quickly caught and eaten. Therefore their common name.

# Last Year Memory



4 Mar 2019 :  
Flamingo  
Boat Safari



17 Mar 2019 :  
Creekwatch in  
Talawe, Nerul



20 Mar 2019 :  
Mangrove walk at  
Aroli Mangrove  
Centre



27 Mar 2019 :  
Mangrove walk  
at Talawe



# APRIL 2020

S		5	19
M		6	20
T		7	21
W		8	22
T		9	23
F		10	24
S		11	25
S		12	26
M		13	27
T		14	28
W	1	15	29
T	2	16	30
F	3	17	
S	4	18	

## Public Holidays

02 April - Ram Navami  
06 April - Mahavir Jayanti  
10 April - Good Friday

## Eco-Days

13 April - International Plant Appreciation Day  
22 April - Earth Day



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## WEAVER ANTS – *The Tree House Builder*

Weaver ants are tree ants that are best known for their remarkable tree houses. Using precise coordination, the weaver ants create very strong ant chains by linking legs to pull and bend leaves into desired tent like positions. The ants then use their own baby as 'glue stick' to secrete a silk that is used to stitch leaves together to create a nest. They are very aggressive territorial ants and for over 1000 years they have often been used by farmers to control agricultural pests.

# Last Year Memory

7 Apr 2019:  
Launch of Chimbai  
Beach Rejuvenation Project,  
United Way Mumbai



20 Apr 2019 :  
Cleanup Drive at  
Kharghar Valley,  
Oracle Mumbai



27 Apr 2019 :  
Clean Up Drive at  
Chittalapakkam Lake,  
Oracle Chennai



25 Apr 2019 :  
Kitchen Gardening  
Workshop at CRISIL  
Foundation, Mumbai



28 Apr 2019 :  
Cleanup Drive at Nizampet Lake,  
Oracle, Hyderabad



# MAY 2020

S	31	3	17
M		4	18
T		5	19
W		6	20
T		7	21
F		8	22
S		9	23
S		10	24
M		11	25
T		12	26
W		13	27
T		14	28
F	1	15	29
S	2	16	30

## Public Holidays

07 May - Buddha Purnima

25 May - Eid-al-Fitr

## Eco-Days

9 May - World Migratory Bird Day

19 May - Endangered Species Day

22 May - International Day for Biological Diversity

23 May - World Turtle Day



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## DUNE CRICKET – *The Good Monster*

Dune Cricket is more of a runner as the rear most part of the wings is coiled, thus it cannot fly. Its splayed feet are good for burrowing and to hunts for prey in the sand. Villagers in Rajasthan call it Moochhar, meaning 'one with a moustache', for its six cm. long antennae.

Crickets are related to grasshoppers. They differ in being active during night and make sound by rubbing their wings.

## *Last Year Memory*



5 May 2019:  
Kharghar Valley Restoration  
Campaign : Seed Collection



19 May 2019: Kharghar Valley  
Restoration Campaign :  
Seedball Making



22 May 2019:  
Kharghar Valley Restoration Campaign :  
Biodiversity Survey



25 May 2019 :  
Mangrove Cleanup at Bhundup Pumping  
Station, Starbucks



# JUNE 2020

S		14	28
M	1	15	29
T	2	16	30
W	3	17	
T	4	18	
F	5	19	
S	6	20	
S	7	21	
M	8	22	
T	9	23	
W	10	24	
T	11	25	
F	12	26	
S	13	27	

## Eco-Days

5 June - World Environment Day

8 June - World Ocean Day

17-23 June - World Pollinators Week



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## RUDDY MARSH SKIMMER – *The Mosquito Hunter*

Common near marshes and ponds, dragonflies play an important role in controlling mosquitoes very effectively. Male is reddish with thin black line on long abdomen, while the female is creamy yellow with brown stripe and black line on its long abdomen.

The adult dragonflies feed on adult mosquitoes while their babies feed on mosquito larvae inside the water. Therefore they are excellent malaria controllers.

## *Last Year Memory*



05 Jun 2019 :  
Cleanup Drive and  
Plantation at Nizampet Lake,  
Wells Fargo India Sol. Pvt. Ltd.  
Hyderabad



7 Jun 2019:  
Checkdam Building at Kharghar Valley,  
DCB Bank Mumbai



7 Jun 2019 :  
Marine Biodiversity Survey  
at Chimbai Beach, Bandra



13 Jun 2019 :  
Cleanup Drive  
at Asola Bhatti  
Wildlife Sanctuary  
Goodera, Delhi



22 Jun 2019 :  
Crab Count  
at Chimbai Beach,  
United Way Mumbai

# JULY 2020

S		12	26
M		13	27
T		14	28
W	1	15	29
T	2	16	30
F	3	17	31
S	4	18	
S	5	19	
M	6	20	
T	7	21	
W	8	22	
T	9	23	
F	10	24	
S	11	25	

#### Public Holidays

05 July - Guru Pornima

#### Eco-Days

01 July - Van Mahotsav Day

26 July - International day of Mangroves

29 July - International Tiger Day



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## LANTERN BUG – *The Long Nosed Bug*

This long-nosed planthopper has a long, slender proboscis that can pierce a tree bark to reach for the sap. Though called as Lantern bug, this group of insects do not emit light. It is closely related to cicadas. They are found in healthy forests, therefore considered as indicators of healthy habitats.

# *Last Year Memory*

13 July 2019 :  
Kharghar Valley  
Trail Restoration, KPMG



26 Jul 2019 :  
National Moth  
Week Celebration  
Vishwajyot High School, Kharghar



27 Jul 2019 :  
Monsoon Trek to Visapur Fort,  
Standard Chartered Bank



# AUGUST 2020

S		9	23
M		10	24
T		11	25
W		12	26
T		13	27
F		14	28
S	1	15	29
S	2	16	30
M	3	17	31
T	4	18	
W	5	19	
T	6	20	
F	7	21	
S	8	22	

## Public Holidays

01 Aug - Bakari Id  
 11 Aug - Janmashtami  
 15 Aug - Independence Day  
 22 Aug - Ganesh Chaturthi  
 30 Aug - Muharram  
 31 Aug - Onam

## Eco-Days

10 Aug - World Lion Day  
 12 Aug - World Elephant Day



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## HOODED GRASSHOPPER – *The Jumping Leaf*

The flat hood gives this grasshopper a leaf like-shape. With this perfect camouflage, this grasshopper remains invisible among the bushes. During the dry season, these grasshopper appear dull brown to match the dry leaves. These are only found in forested areas. They are vegetarian in diet. They 'sing' songs to attract their partners by rubbing their back legs on their wings. Every song is unique to a species so there are no wrong connections!

## *Last Year Memory*

7 Aug 2019 :  
Ladybird got empaneled  
with Andhra Forest Department



13 Aug 2019 :  
Development of Butterfly  
Park in Saharanpur, Uttar Pradesh



14 Aug 2019 :  
Anniversary of Nizampet Lake Project,  
Wells Fargo India Sol. Pvt. Ltd.



25 Aug 2019 :  
Chimbai Beach Project  
Perception Survey at Jogger's Park,  
United Way Mumbai

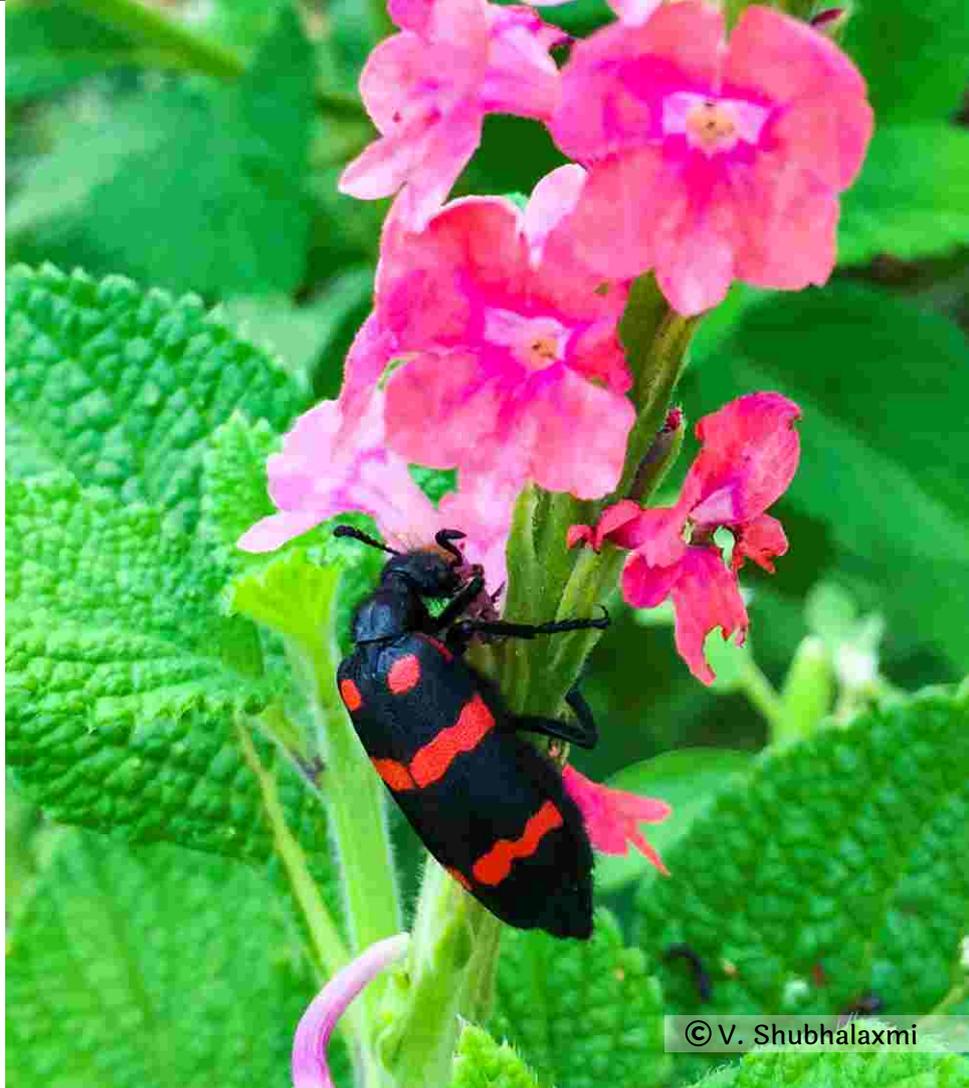


# SEPTEMBER 2020

S		6	20
M		7	21
T		8	22
W		9	23
T		10	24
F		11	25
S		12	26
S		13	27
M		14	28
T	1	15	29
W	2	16	30
T	3	17	
F	4	18	
S	5	19	

## Eco-Days

16-18 Sept - Clean up the World Campaign  
 20 Sept - International Day for Coastal Clean Up  
 21 Sept - Zero Emissions Day  
 22 Sept - World Rhino Day



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## COMMON BLISTER BEETLE – *The Bold & Beautiful*

Bright colours on this slow moving beetle warn of a distasteful encounter as this beetle can cause blisters to the tormentor by a chemical called cantharidin it has Cantharidin is used in hair tonics. Beetles are partial to yellow flowers to feed upon. Blister beetles are known to undergo complex life stages where the juveniles are parasitic on various insects.

Beetles are largest group of insects in the insect world. They are largely vegetarian.

# Last Year Memory

14 Sep 2019 :  
Monsoon Walk at  
Polo Forest, Ahemdabad,  
Standard Chartered Bank



14 Sep 2019 :  
Monsoon Trail at Karnala Bird Sanctuary,  
Standard Chartered Bank



21 Sep 2019 :  
Habitat Restoration at Urban Haat,  
CBD Belapur, KPMG



21 Sep 2019 :  
Monsoon Trail  
at Karnala Bird Sanctuary,  
Standard Chartered Bank



29 Sep 2019 :  
Insect Safari  
Green Valley Park,  
CBD Belapur



# OCTOBER 2020

S		4	18
M		5	19
T		6	20
W		7	21
T		8	22
F		9	23
S		10	24
S		11	25
M		12	26
T		13	27
W		14	28
T	1	15	29
F	2	16	30
S	3	17	31

## Public Holidays

02 Oct - Gandhi Jayanti

25 Oct - Dussehra

30 Oct - Id-e-Milad

## Eco-Days

2-8 Oct - Wildlife Week

4 Oct - World Habitat Day

5 Oct - World Animal Welfare Day



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## LEAF INSECT – *The Walking Leaf*

This dweller of dense forest is a classic example of how nature sculpts its own creations for their survival. The camouflage is perfect with leaf "veins", and even brown edges that mimic a damaged leaf. If in a bush, it is impossible to locate a leaf insect among the leaves. Usually about 2 to 4 inches long, leaf insects are vegetarian.

They are relatives of stick insects who are known to grow new leg, in case one gets broken.

# *Last Year Memory*

5 Oct 2019 :  
Cleanup Drive at  
Kalyana Lake



16 Oct 2019 :  
Cleanup Drive  
at Gurgaon, DCB Bank



19 Oct 2019 :  
Plantation for Butterfly  
Garden in Urdu Primary School,  
Society Generale,  
Bangalore



30 Oct 2019 :  
Marine Survey at Chimbai  
Beach, Mumbai

# NOVEMBER 2020

S	1	15	29
M	2	16	30
T	3	17	
W	4	18	
T	5	19	
F	6	20	
S	7	21	
S	8	22	
M	9	23	
T	10	24	
W	11	25	
T	12	26	
F	13	27	
S	14	28	

Public Holidays

14 Nov - Diwali

Eco-Days

12 Nov - Dr. Salim Ali's Birth Anniversary



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## SPOTTED ORANGE SHIELD BUG – *The Sap Sucker*

When at rest, the real wings of this bug are hidden under the orange shield-like cover. Real wings are seen only when the bug takes a flight. Female of this bug lays a bunch of eggs on the underside of a leaf, and stands guarding the eggs till the young hatch and leave to fend for themselves. They suck plant juices using their 'syringe' like mouth part.

# *Last Year Memory*

3 Nov 2019 :  
Birdwatching at Green  
Valley Park, CBD Belapur



15 Nov 2019:  
Launch of Online Course  
on Kitchen Gardening



17 Nov 2019 :  
Marine Walk at Chimbai Beach,  
Bandra



17 Nov 2019 :  
Birdwatching at Kharghar  
Mangroves, Local Citizens



18 Nov 2019 :  
Free Marine Walks for Schools at  
Chimbai Beach,  
MKES High School, Mumbai



30 Nov 2019 :  
Conclusion of Online Course on  
Bugs for Beginners



# DECEMBER 2020

S		13	27
M		14	28
T	1	15	29
W	2	16	30
T	3	17	
F	4	18	
S	5	19	
S	6	20	
M	7	21	
T	8	22	
W	9	23	
T	10	24	
F	11	25	
S	12	26	

Public Holidays  
25 Dec - Christmas Day

Eco-Days  
5 Dec - World Soil Day  
14 Dec - World Energy Conservation Day



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## VIOLIN MANTIS – *The Walking Twig*

Almost impossible to detect this cryptic predator among the grass or bushes. During the rains, this mantis is green to match the monsoon greenery, but turns brown in the dry season to merge among the brown twigs. Mantis have their forelegs greatly enlarged and adapted for catching and gripping insect prey.

They get their common name from the ‘praying’ pose which is infact a ‘preying stance’.

# Last Year Memory

5 Dec 2019 :  
Launch of Butterfly Garden  
CSR Project at St. Anthony  
High School, Gughen  
Transparent Value,  
Mumbai



7 Dec 2019 :  
Butterfly Garden at  
Hope Foundation School,  
Bangalore,  
United Way Mumbai



7 Dec 2019 :  
Butterfly Garden at  
Government High School,  
Telangana, United Way Mumbai



7 Dec 2019 :  
Butterfly Garden Plantation  
at CHIP House,  
Kolkata, United Way Mumbai

12 Dec 2019 :  
Clean Up Drive  
at Nizampet Lake,  
Goodera, Hyderabad