



What does nature in cities look like?

Citizen science is transforming the way we understand and conserve biodiversity. It invites everybody to become active participants in scientific research, allowing anyone with a smartphone or camera to contribute valuable ecological data.

Terra, Expo City Dubai is utilizing citizen science to collect urban biodiversity data to help answer the question - what do cities in nature look like? With a mission to transform the way people connect with nature, Terra is a hub for sustainability, citizen science and biodiversity conservation.

At Terra, the primary method of collecting and analyzing biodiversity data has been through the global database iNaturalist. On this program, an active event called the Terra Biodiversity Project helps track fauna and flora around Terra's thriving landscape. Engaging the UAE's local communities along with organizations such as Emirates Nature-WWF and the Dubai Natural History Group allows for large scale data collection in a short time, providing valuable information about our local species diversity. These long-term datasets are critical for tracking biodiversity trends and could even inform regional biodiversity assessments and highlight the importance of tracking biodiversity in an urban

setting such as Expo City Dubai.

Aside from the scientific benefit of citizen science for the conservation of biodiversity, it also contributes to local community engagement by raising awareness and allowing for participants to gain firsthand experience with local biodiversity while providing them with opportunities to learn about species identification, ecological processes, and scientific methods. Citizen science bioblitzes strengthen community bonds and encourage the tribe to take an active role in conserving their local environments. Many projects, including the Terra Biodiversity Project, also incorporate traditional ecological knowledge, strengthening the link between local culture and biodiversity conservation.

By aligning its mission of building a world where Nature and humans thrive in harmony, Terra uses citizen science to empower people to notice, record, and protect the natural world while creating a more sustainable and biodiverse future for Dubai and beyond.

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City Nature Challenge 2025

The City Nature Challenge
2025 marked a decade of global
collaboration for biodiversity,
reinforcing its status as one of the
largest citizen science events in the
world. Launched by the California
Academy of Sciences and the Natural
History Museum of Los Angeles
County in 2015, the City Nature
Challenge turns simple moments
of noticing and recording nature
into powerful acts of conservation.

This year, the 2025 Challenge saw participation from 669 cities across 62 countries, culminating in a recordbreaking 3.3 million observations of wild plants, animals, and fungi. Over 103,000 people contributed to this effort, showcasing the incredible power of grassroots environmental engagement.

Terra, Expo City Dubai, was the proud host and organizer of the City Nature Challenge 2025: Dubai edition. This is the first year that Dubai and the UAE have been represented as participants on the global citizen science biodiversity map. Dubai's participation in this Challenge marked a significant milestone in the city's commitment to biodiversity and citizen science.

Over the 4 day observation period from April 25 to 28, residents and visitors engaged in documenting the city's rich natural heritage, contributing to a global effort to catalogue urban wildlife.

The <u>Dubai project</u> amassed over 1,300 observations, showcasing the enthusiasm and dedication of the community. Participants ranged from seasoned naturalists to first-time observers, all united by a shared curiosity about the natural world. The diversity of observations highlighted the unique ecosystems present within and around the city.

City Nature Challenge 2025: **Dubai**

The Terra led City Nature Challenge events in Dubai were characterized by a series of guided walks and bioblitzes, with a focus on different urban habitats and species.

- April 25: In collaboration with Emirates Nature-WWF, a morning nature walk around the Terra landscape with 50 Expo City Dubai community members, revealed urban biodiversity, like salmon arab butterflies, white-eared bulbuls, and purple sunbirds.
- April 26: In collaboration
 with Emirates Nature-WWF,
 an evening exploration of the
 Al Marmoom desert with 60
 Expo City Dubai community
 members unveiled nocturnal
 creatures such as scorpions,
 desert geckos, and beetles.
- April 27: In collaboration with Dubai Holding Entertainment, a visit to Dubai Parks & Resorts with 15 Expo City Dubai community members including families with children, revealed wetland species by the pond, with sightings of damselflies, slender skimmers, and blue butterflies.
- April 28: In collaboration with Emirates Nature-WWF and the Nature Wave, a bioblitz at Terra engaged 90 students

from local schools, who documented various insects, birds and butterflies, fostering hands-on learning experience.

The success of Dubai's City Nature Challenge participation was amplified by the collaborative efforts of organizations such as Emirates Nature-WWF, Dubai Holding Entertainment, and The Nature Wave. Their support in organizing events and promoting awareness played a crucial role in mobilizing the community. Educational institutions, like the Arbor School and the Jebel Ali School, also contributed significantly, with students actively participating and gaining firsthand experience in biodiversity documentation.

Dubai's inaugural involvement in the City Nature Challenge has set a precedent for future citizen science initiatives in the region. The collective efforts have not only enriched global biodiversity databases but have also instilled a sense of environmental stewardship among participants. As the city continues to grow and develop, such initiatives will be vital in balancing urban expansion with ecological preservation.





















3,310,131Observations

Contributed by community scientists worldwide

73,765+ Species

Including 3,338 rare/threatened/ endangered **102,945** People

From 669 cities in 62 countries on 6 continents

Featured observations from around the world



Pacific Trillium
 BRITISH COLUMBIA, CANADA found by Joan Septembre Rare four parted Trillium also known as a Quadlium!



 Townsendia pulcherrima ARLINGTON, TEXAS, USA found by Sam Kieschnick First observation on iNaturalist and rarely documented species.



3. Eresus sandaliatus AALBORG, DENMARK found by Mikkel Rødvig Near-threatened velvet spider found in Denmark.



 Mediterranean Fanworm MARSEILLE, FRANCE Sylvain Le Bris captured this fanworm along with a snail.



5. Arabian Gazelle
UNITED ARAB EMIRATES
found by Rohail Akbar
Vulnerable and endemic to
Asia, documented from a new
city joining for 2025.



14. Chisos Mountain Crested Coralroot MICHOACÁN, MEXICO found by @elimaya Critically endangered.



13. Brown-throated Sloth PANAMA CITY, PANAMA Cute sloth observed and phtographed by Nathan Külling.

12. Cerro Socopo Tree Frog CAYENNE, FRENCH GUIANA found by Quentin Uriot

K = thousand M = million

Critically endangered and endemic, found by a new



11. Giant Sphinx COCHABAMBA, BOLIVIA This vibrant green caterpillar was found by Beimar Fuentes Ramos, a brand new iNaturalist user.



10. Pretzel Slime Mold PRETORIA, SOUTH AFRICA Amazing pretzel look-alike slime mold found by @Lizziepop.



9. Gold-banded Forester MAPUTO, MOZAMBIQUE found by @sarahhbanner A beautiful observation by a brand new iNaturalist user!



6. Hawksbill Sea Turtle
DAVAO, PHILIPPINES
found by Michael P. Sibbaluca
Critically endangered species
documented by a new
iNaturalist user.



ANDHRA PRADESH, IN found by Sri P. Tamarapalli A nudibranch rediscovered after 160 years!



8. Weedy Sea Dragon MELBOURNE, AUSTRALIA found by @hunterefs Vulnerable and endemic to Australia.

Founded in Los Angeles and San Francisco in 2016

10 years of bringing the world together for biodiversity

 12,948,135
 113,320
 363,723

 Observations
 Species
 People

 Cities
 2
 16
 68
 159
 244
 419
 445
 482
 690
 669

 Countries
 1
 1
 17
 28
 40
 44
 47
 46
 51
 62

 Observations
 19.8K
 125K
 441K
 963K
 815K
 1.27M
 1.7M
 1.9M
 2.4M
 3.3M

 Species
 2.5K
 8.6K
 18K
 31K
 32.6K
 45.3K
 50.1K
 57.2K
 65.7K
 73.7K

 Observers
 1K
 4K
 17K
 32K
 41K
 52K
 67.2K
 66.4K
 83.5K
 103K

NATURAL
HISTORY
MUSEUM
CALIFORNIA
ACADEMY OF







Dubai 2025 Featured Observations





1371 OBSERVATIONS

contributed by Dubai's residents as citizen scientists



326 SPECIES

including both wild and captive/cultivated flora and fauna



ARABIAN RED DWARF HONEY BEE | DIFC

found by Ahmed Almansoori (ahmed_almansoori)
The UAE's only wild and native honeybee that is
often seen nesting on the national Ghaf tree. They
are important pollinators for our desert flowers.



ARABIAN BABBLER | MUSHRIF PARK

found by zfrinan

A native resident bird with a very long tail. Often seen hopping around on the ground.



TIGER BEETLE | AL MARMOOM

found by Drew Gardner (asgardner)
A fierce predator, pictured here with its meal!
They use their thin, long legs to run fast and their big, bulgy eyes to hunt for prey.



DESERT BABUL BLUE | AL FURJAN

found by kateryna_f

A tiny desert butterfly that has a beautiful purple blue hue on the inside of its wings. It feeds on the acacia.



ETHIOPIAN HEDGEHOG | AL MARMOOM

found by lucaghess

One of the only 2 native hedgehog species in the UAE, this nocturnal hedgehog is a rare find in the deserts of Al Marmoom



PURPLE SUNBIRD | TERRA, EXPO CITY DUBAI

found by Georgina Pereira (georgina 168)
A native resident sunbird species that has a long curved beak, making it an important pollinator for



EVAN'S BLUETAIL | DUBAI PARKS & RESORTS found by Benedict Samuel (benedict555)

A desert damselfly with an easily recognizable blue spot on its tail. When resting, damselflies have their wings folded.



PUFFBALL MUSHROOM

AL MARMOOM

found by iivana1291

A rare find and a desert fungi species that still needs to be researched more in the UAE.



YELLOW-SPOTTED AGAMA | JEBEL ALI

found by Phillip Dunn (phillip_dunn)
A lizard that is endemic to the Middle East and has yellow spots along its blue body. This agama also has an orange yellow tail.



ARABIAN GREAT SHRIKE | AL MARMOOM

found by Alessandro Budroni (alessandro49244) A native and non-migratory shrike that is also called the butcherbird because it likes to impale its prey before feasting!



AFRICAN MONARCH | MIRDIF

found by Chris Mcconnell (chris99028)
Also a plain tiger or milkweed butterfly,

Also a plain tiger or milkweed butterfly, thanks to its striking orange colour and its host milkweed plants, like the native sodoms apple



MIDDLE EASTERN SHORT-FINGERED GECKO

AL MARMOOM

found by Rohail Akbar (tnaturalworld)

A UV fluorescent dune gecko that is often seen standing firmly on the sand, with its tail up in the air, to make itself seem bigger.







Dubai 2025 Featured Observations





126 OBSERVERS

from neighbourhoods throughout the city of Dubai



119 IDENTIFIERS

contributed to making observations Research Grade



CRESTED LARK | AL MARMOOM

found by anvar1071

A native non-migratory lark that is often seen picking at grains or seeds, but can sometimes be observed catching beetles.



ARABIAN PAPER WASP | JEBEL ALI

found by Sheena Khan (sheenakhan)

A wasp that is both a predator and an accidental pollinator. They live in colonies and build paper like nests.



ARABIAN DESERT SHIELD BUG

AL MARMOOM

found by jbyasse

A common desert dweller with a shield like shape that is often seen feeding in the night.



found by abusamra

A resilient desert beetle that survives the extremely dry and harsh climate by collecting atmospheric water on their hard wings.



WOLF SPIDER | AL MARMOOM

found by hildaecdnature

A solitude spider pictured here with an egg sac on its back. It is an agile hunter with excellent eyesight.



SAND GAZELLE | AL MARMOOM

found by noahexploresworld

A native desert antelope that is both fast and shy, and is commonly known to give birth to twins regularly.



EURASIAN COLLARED-DOVE | AL GARHOUD

found by Donna Schakelaar (donna165)

A native resident dove species that has a

distinct black marking which resembles a

LARGE CARPENTER BEE | MIRDIF

True to its name, this skilled bee's nesting

behaviour is to burrow into hard plant material

collar on its neck.

found by parimani

like wood

found by malinb_

Once declared extinct in the wild, this antelope now thrives in our desert. Its striking white body and long, straight horns stand out in the dunes.



SLENDER SKIMMER

DUBAI PARKS & RESORTS

found by Helene Coulon (helene_coulon)
A dragonfly that is a skilled hunter, both on land and in water. When resting, dragonflies have open wings that are spread apart.



SALMON ARAB CATERPILLARS

TERRA, EXPO CITY DUBAI

salmon arab butterflies.

found by Arabella Willing (arabellawilling)
Pictured here on the toothbrush tree leaf, the
feeding caterpillars will soon evolve to be



ARABIAN SHORT-FINGERED GECKO

AL MARMOOM

found by mohammed_roshan

Also called the sand gecko, this UV fluorescent desert lizard is a common sight in the deserts of Dubai.

Marketing and Communications

Highlights:



Social Media

Estimated reach: 5,000,000+

dedicated in-feed posts on Terra social media channels

INCLUDING

5 collaboration posts

on Instagram with main Expo City Dubai page with 1.3 million followers

5x posts

on TikTok, Facebook and YouTube

> 1x post on LinkedIn

33x stories

shared on Terra Instagram

45,000+ impressions 450+

30.000+ engagements video views



Post on Nat Geo Arabia reaching their



9:41

PR

Estimated impressions:

12,500,000

11x

published articles

INCLUDING

articles in tier 1 daily publications

Gulf News and The National

Published through

WAM



1x post

prime time radio interview Link



Other channels and assets:

Dedicated webpage:

City Nature Challenge

Supplementary designed artwork:

Fauna **Bingo Card**

E-shot

to Terra database

Mention in ECD newsletter to full database of

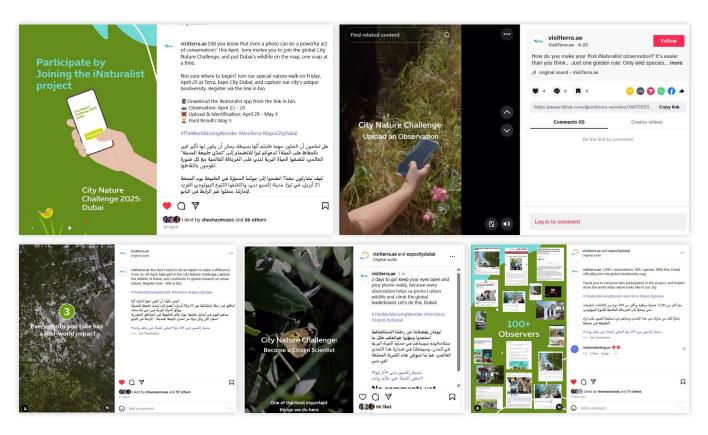
1m+

Invites sent to all ECD employees and tenants

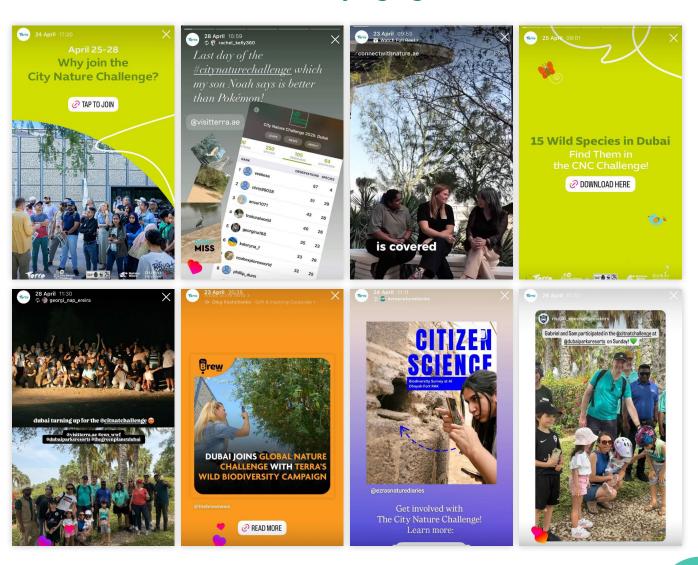
9x

entries to social media competition

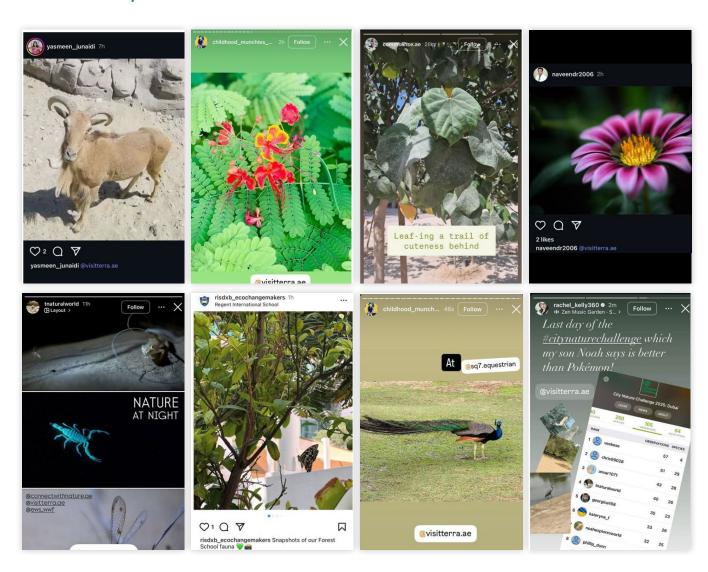
Owned Social Media Content: In-feed



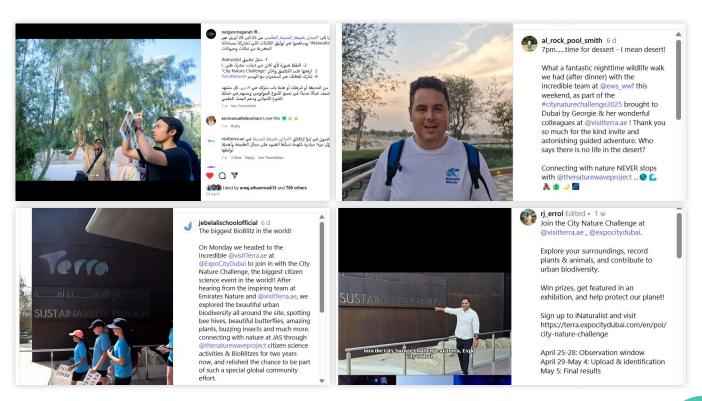
Owned Social Media Content: Story highlights



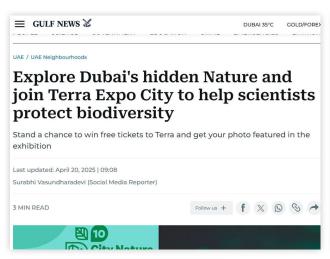
Social Competition



Community Posts



Press & Media:



Dubai's Expo City invites public to take part in huge wildlife project this weekend

Citizens scientists across the emirate encouraged to document urban biodiversity as part of the City Nature Challenge



TAKE THE CITY NATURE CHALLENGE WITH TERRA





تستضيف «تيرا» مدينة إكسبو دبي تحدي طبيعة المدينة العالمي، من اليوم وحتى 28 أبريل الجاري، بمشاركة مجتمعية واسعة، بالتعاون مع جمعية الإمارات للطبيعة، ومحفظة دبي القائمة، ومنطقة «البيئتير وارشك» بوخد توثيق الحياة البرية المجلبة، وتعربر الوعي السين، والتحدي مبادرة علمية عالمية تهدف الى تسحيل المشاهمات البيئية في المددن، باستخدام تطبيق «إيناتوراليست»، إذ تجاوز عدد الأنواع الموثقة من خلالة حتى اليوم سبعة ملايين نوع حول العالم، ما يشكل رافداً علمياً لحماية التنوع البيولوجي





«تيرّا» تحتضن تحدّى طبيعة المدينة العالمي

24 أبريل 2025 | 02:05 صباحا

🗘 قراءة حقيقة واحدة



Terra Leads Dubai's Participation in Global City Nature Challenge









Terra, Expo City Dubai, is proud to host the City



ne > Green News > Dubai joins global nature challenge with Terra's wild

Dubai joins global nature challenge with Terra's

wild biodiversity campaign



Explore the Wild Side: Terra Leads **Dubai's Participation in Global City** Nature Challenge

Take part in the city's ultimate wildlife expedition from 25-28

Published on: 23 Apr 2025, 2:31 pm · 3 min read











تيرًا تقود مشاركة دبي في تحدّي طبيعة المدينة العالمي



Impact and Reach: Join Us Now for 2026!

The City Nature Challenge has emerged as a transformative global initiative, harnessing the collective efforts of residents to document urban biodiversity. The growth of the Challenge over the last ten years underscores the increasing recognition of the importance of community engagement in biodiversity conservation.

The impact of the Challenge extends beyond data collection. It fosters environmental awareness, educates participants about local ecosystems, and encourages stewardship of natural resources. By engaging individuals in hands-on scientific activities, the Challenge empowers communities to take an active role in understanding and protecting their local environments.

In Dubai, the 2025 City Nature
Challenge marked a significant
step in integrating citizen science
into the city's sustainability initiatives.
Participants documented a diverse
array of species, from urban adapted

birds to desert dwelling reptiles, showcasing the rich biodiversity present even in arid environments. The event also served as an educational platform, with events and guided walks enhancing public understanding of local ecosystems.

The success of the Challenge in Dubai reflects the city's commitment to environmental conservation and public engagement. It demonstrates how urban centers can play a pivotal role in global biodiversity efforts by mobilizing residents to observe, record, and appreciate the natural world around them.

Looking ahead, the momentum generated by the 2025 Challenge provides a strong foundation for ongoing citizen science initiatives in Dubai. Between now and the next City Nature Challenge, Terra will continue to champion urban conservation through regular community bioblitzes and citizen science workshops. Additionally, Terra will be convening a UAE

Urban Biodiversity Coalition for professionals later this year, creating a national platform for collaboration and action.

By continuing to support and expand such programs, we further the goals of UAE's sustainability, education, and biodiversity conservation, together. We invite organizations who wish to be involved in the City Nature Challenge 2026 and the UAE Urban Biodiversity Coalition to reach out. Let's join forces to make next year's edition bigger and better, so we can start to track Dubai's urban biodiversity trends over time.

The City Nature Challenge will be back in 2026, and Dubai will be back on the map! Until then, go out, explore, continue making observations, and come visit us at Terra, Expo City Dubai.

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