









#### CITIZEN AND COMMUNITY SCIENTISTS THROUGHOUT THE WORLD COMPETE IN

# **'CITY NATURE CHALLENGE 2018'**

**APRIL 27-30** 

Third Annual 'Challenge' Grows to Over 65 Participating Cities on Five Continents and nearly 300 Partnering Museums, Science Centers and Organizations.





















### What is the City Nature Challenge?

It's a multi-day GLOBAL competition where cities are in a contest against each other to see who can make **the most observations of nature**, **who can find the most species**, **and who can engage the most people**. Citizens use mobile phone app and/or website to submit the observations they collect.

The goal is both to involve citizens and to find and document plants and wildlife in cities.

Launched by the Citizen Science Departments at the **Natural History Museum of Los Angeles County** and the **California Academy of Sciences.** 

First-ever City Nature Challenge in 2016 (LA vs San Francisco).

In 2017, more than 4000 people participated in the City Nature Challenge across 16 US cities. In just five days, they made over 125,000 observations of nature and documented more than 8600 species, including 392 rare/endangered/threatened species.

As a result of such successful edition, the event went global.





















### Where is the City Nature Challenge 2018?

The City Nature Challenge is an effort to explore urban nature and document biodiversity in cities around the world.





















### **Padova & Roma: the more the merrier!**













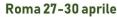














Scendi in campo insieme a ricercatori e esperti e invia seanalazioni di specie di fauna e flora di interesse!











DI BIOLOGIA AMBIENTALE













### How citizens do collect wildlife observations?

































### **Participating is easy!** All you have to do:



- Find wildlife. It can be any plant, animal, fungi, slime mold or other evidence of life, such as scat, fur, tracks, shells and carcasses, found anywhere
- Take a picture of what you find. Be sure to note the location of the plant or critter.
- Share your observations. Upload your photos and findings to CSMON-# The app is free to download on Apple's App Store or Google Play for Android.

















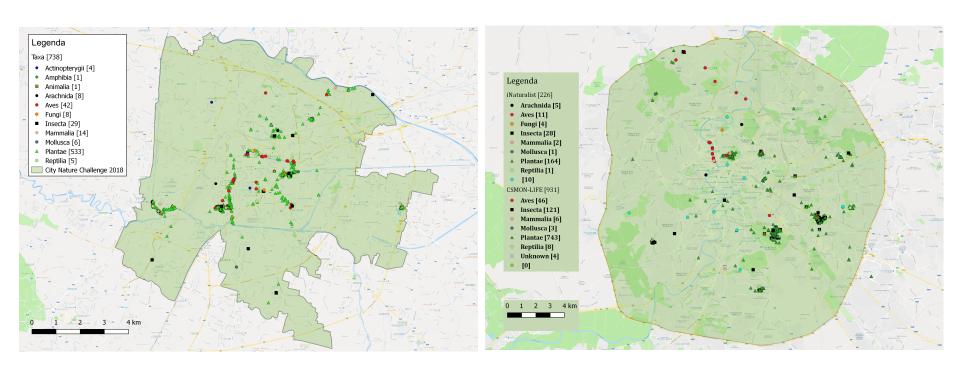




## City Nature Challenge 2018 @Padova & Roma: outcomes

Among the ten European cities, Rome and Padua were the two Italian representatives.

During the 4-day event, **261 citizens collected 1,895 observations of 541 taxa** (738 observations in Padua, 1157 in Rome).



At the end of CNC, data have been validated and are now feeding national (Italian Network of Biodiversity) and international (Global Biodiversity Information Facility - GBIF) aggregators of primary biodiversity data.



















### City Nature Challenge 2018 @global outcomes

During the 4-days over **17,329 people managed to record 441,888 observations** from around the world, and smashed the previous biggest day records.



Have been also made **4,075 Research Grade observations\* of 599 rare, endangered, and threatened species globally, and added over 100 new species that had not previously been recorded** on iNaturalist EVER!

\* Observations become "Research Grade" when the community agrees on species-level ID or lower, i.e. when more than 3 of identifiers agree on a taxon.



















### **City Nature Challenge 2018 @fancy outcomes**

CityNatureChallenge Retweeted



Alison Young @alisonkestrel · Jun 5

"Were there any species that were found in ALL of the cities during the #CityNatureChallenge?" No, but there were some that were found in a lot of the cities... all very recognizable city denizens!

#### **Common species**

scientific_name	# of cities	
Taraxacum officinale	48	
Columba livia	47	
Passer domesticus	45	
Apis mellifera	44	
Anas platyrhynchos	44	
Trifolium repens	43	
Armadillidium vulgare	42	
Plantago major	41	
Hirundo rustica	40	
Sturnus vulgaris	39	
Hedera helix	38	
Zenaida macroura	37	
Agelaius phoeniceus	37	
Branta canadensis	36	
Harmonia axyridis	36	
Cathartes aura	36	



















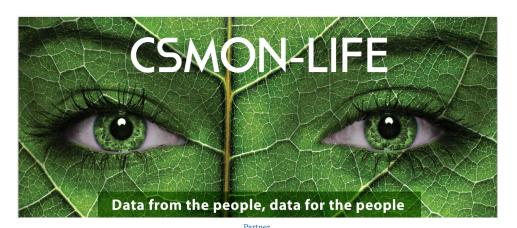






### **CSMON-LIFE: where it all began**

One of the first Italian projects funded by EU (LIFE+ Programme, LIFE13 ENV/IT/000842) focusing on citizen science approach to monitor biodiversity. The project stimulates the participation of citizens, involving them in the study, management and conservation of biodiversity, and creating an active collaboration between citizens, scientific community and institutions.

































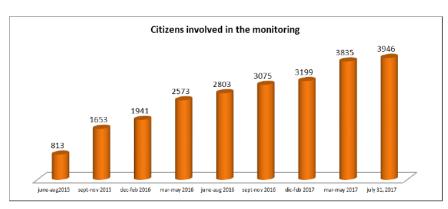


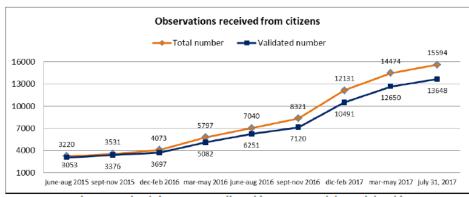




### **CSMON-LIFE** @outcomes

#### Almost 4000 citizens sent about 16000 observations on 1608 taxa (validation accuracy of 87.6%).





#### Among these observations, 9372 refer to the 66 target species of the CSMON-Life project (60%), mainly on the alien species

Plant alien species - Action B2:	
Ailanthus altissima (Miller) Swingle	2347
Ambrosia artemisiifolia L.	277
Carpobrotus edulis (L.) N.E.Br.	111
Opuntia ficus-indica (L.) Mill.	232
Oxalis pes-caprae L.	28
Phytolacca americana L.	190
Robinia pseudoacacia L.	702
Senecio inaequidens DC.	568
Chamaesyce prostrata Aiton	1
Datura stramonium L.	13
Agave americana L.	13
Eichhornia crassipes P	2

Animal alien species – Action B2:	
Astacus leptodactylus	1
Cacyreus marshalli	28
Emys orbicularis	12
Myiopsitta monachus	145
Procambarus clarkia	22
Psittacula krameri	136
Rhynchophorus ferrugineus	51

#### Plant rare species - Action B3:

Pancratium maritimum L.	157
Ruscus aculeatum L.	145













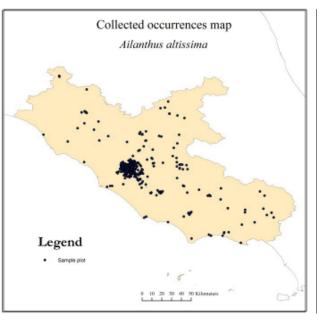




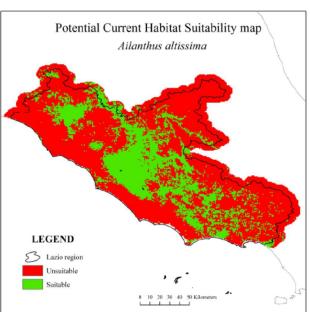


### **CSMON-LIFE** @citizen science really strikes!

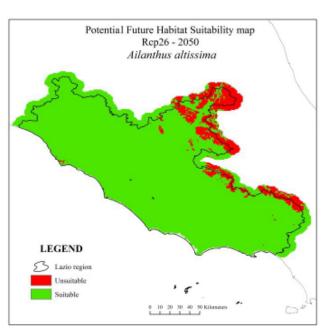
#### **Species Range Shifts**



#### **Ecological Niche Modeling**



#### **Climate Change Impact**





















### Why Citizen Science, why City Nature Challenge?

Nature is everywhere, and the best way to study it is by connecting community and scientists through citizen science (many citizens can feed few researchers).

The goal is to both **engage local residents** in the value of biodiversity, but also to **collect important data** for scientists, land managers, non-profits, and governments about the areas that they help to protect.



The time is now ripe to **establish Permanent Citizen Observatories** which will really let citizen science click up. People shall collect data on specific environmental issues using rigorous scientific monitoring protocols provided by researchers (e.g. to avoid not uniform sampling).



























Nature

Challenge











7A-700 MA BROKES





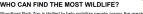
DALLAS-FORT WORTH

AUSTIN SAN ANTONIO

RIO GRANDE VALLEY EL PASO AMARILLO

#### CITY NATURE CHALLENGE SEATTLE METRO AREA APRIL 27-30, 2018





Woodland Park Zoo is thrilled to help mobilize people across the greater Seattle area (all of Snohomish, King and Pierce counties) to join a friendly nature observation competition involving over 75 cities in 18 countries across the globel

Which city can find the most species of plants, animals and other living





Ciudades con vida

27-30 de abril de 2018

City Nature Challenge, Área Metropolitana de Madrid



City

**Nature** 

Challenge 2018 April 27-30



















### Why Citizen Science, why City Nature Challenge?





#### LIFE PRIMED (LIFE17 NAT/GR/000511)

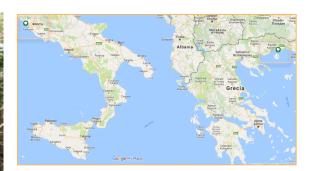
Restoration, management and valorisation of PRIority habitats of MEDiterranean coastal areas

SCI IT6030022 Bosco di Palo Laziale - ITALY

GR1150010 Delta Nestou Kai Limnothalasses Keramotis (Delta of River Nestos) - GREECE

start date: 02/07/2018 - end date: 30/06/2023







STEP 1 Find Wildlife



STEP 2
Take a Picture of What
You Find
Note the location.



STEP 3
Share Your Observations
Share your findings
with actual scientists.



STEP 4
Help identify what everyone found















