

# Surveillance of native and non-native ticks and tick-borne diseases at the Sovereign Base Areas of Cyprus



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CYPRUS IS HOME TO MANY TICKS SPECIES HOWEVER THERE IS A LACK OF EFFECTIVE IDENTIFICATION AND SURVEYING. WE AIM TO ADDRESS THIS THROUGH A PILOT SURVEILLANCE SCHEME.



TO ACHIEVE EFFECTIVE SURVEILLANCE, MONITORING REPORTS ARE REQUIRED FROM VARIOUS SOURCES LIKE FORESTS, FARMLANDS, DOMESTIC AREAS, LOCAL COMMUNITIES, AND ANIMAL SIGHTINGS.

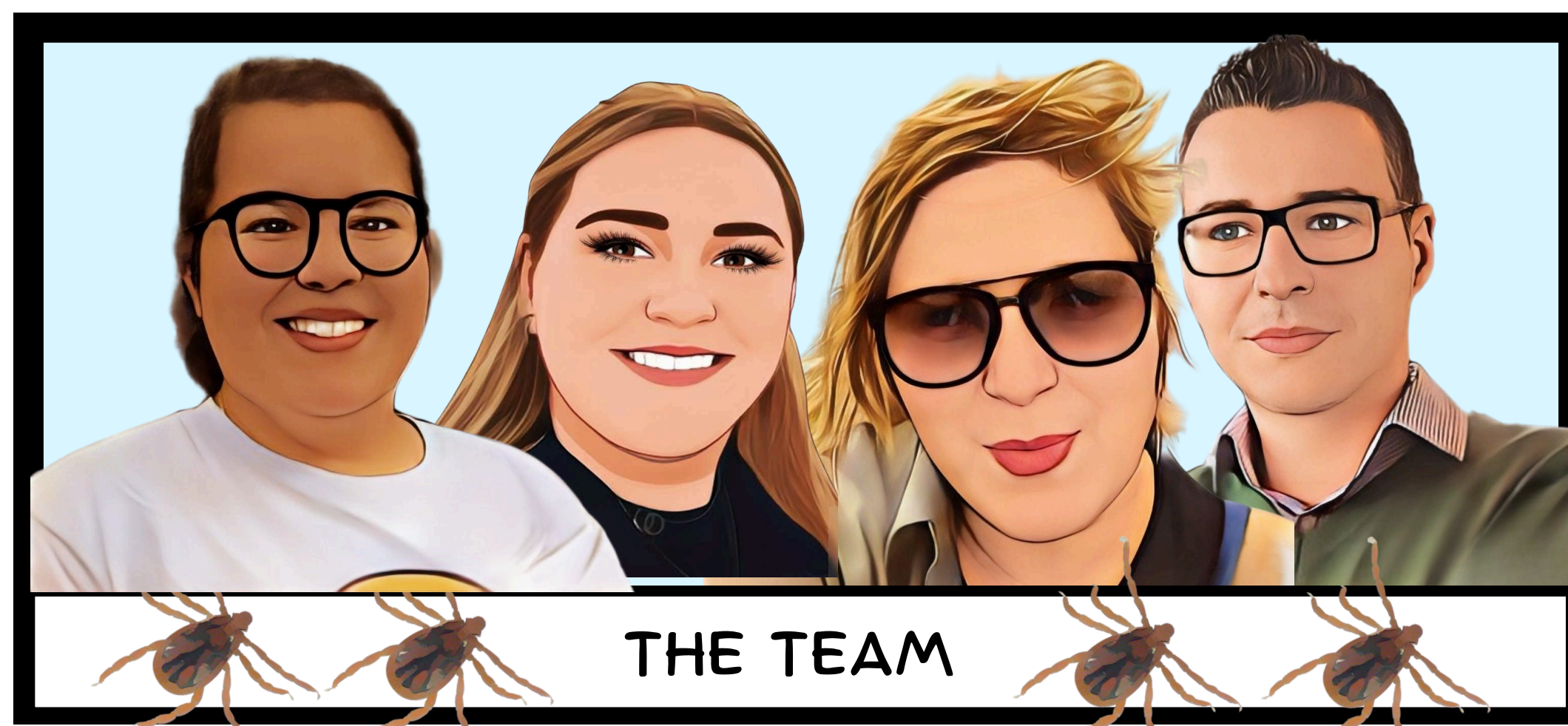
METHODS: DRAGGING , CO2 TRAPS & FLAGGING



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THIS INFORMATION WILL HELP EDUCATE THE PUBLIC ABOUT TICK-RELATED RISKS AND THREATS BY DISTRIBUTING INFORMATIVE MATERIALS.



THE TEAM



## BACKGROUND

Ticks are major vectors of pathogens that causing disease to animals and humans. They spread pathogens such as ***Rickettsia spp.***, ***Borrelia spp.***, ***Anaplasma spp.*** and ***Babesia spp.*** etc. There are 19 tick species of five different genera in Cyprus that have been found on animals. Studies on unengorged questing/hunting ticks their seasonality and associated pathogens are missing.

## FINDINGS



- We have recorded three species ***Ixodes ventaloii***, ***Ixodes ricinus/inopinatus*** and ***Rhipicephalus turanicus s.l.***
- Adult ticks are the predominant tick developmental stage collected.
- First report of a presumably established ***Ixodes ricinus/inopinatus*** from Cyprus.
- In a subset of ***Ixodes ricinus/inopinatus*** ticks ***Rickettsia monacensis*** was detected. ***Borrelia spp.*** were not present.
- A peak in adult tick activity was observed for ***Rhipicephalus turanicus s.l*** in April and for ***Ixodes ricinus/inopinatus*** in February.

## PROJECT AIMS & METHODS

To improve our knowledge on tick biodiversity and associated impacts within the **SBA**s in Cyprus and to raise awareness about ticks and tick-borne diseases among the local population. Collecting ticks every 15 days, using dragging / flagging and CO2 traps, in 6 different habitat types at SBAs Cyprus

## PROJECT PROGRESS

- Ticks are undergoing **molecular analysis** for a variety of pathogens.
- **Educational materials** have been created for children and adults
- A **knowledge, attitude and practices (KAP)** study related tick and tick-borne diseases among the local population, is currently running to guide future public health initiatives.

## NEXT STEPS

- Continuing with sampling and molecular analysis for pathogens.
- Analysing the results of KAP questionnaire

## ACKNOWLEDGEMENTS

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