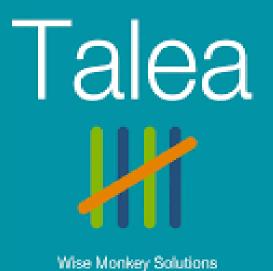
Free roaming dog estimation tools the TALEA app

Tomislav Mikuš Andreas Chaidousis Anida Dinarević



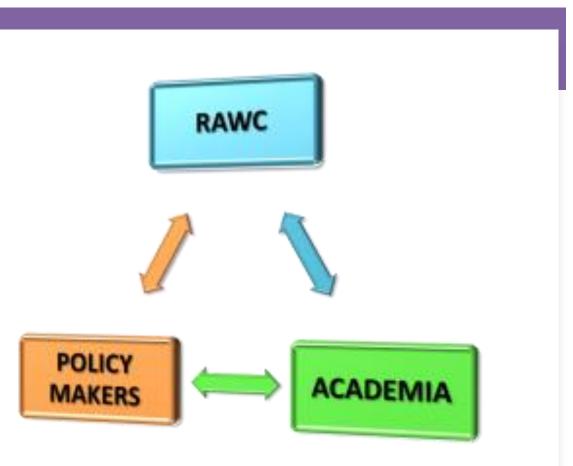


8.



Overall strategy

• to bridge over the gap between Academia and Policy makers in the region and to help them in the implementation of regional and international best practices in the field of Animal Welfare.



RAWC prioritize activities in the following areas

- Training of business operators and stakeholders (slaughter, pigs, broilers and transport) – coordination and dissemination of information and resources;
- Experimental animals implementation and training;
- Companion animals population management and dog population management develop a regional approach and share best practice;
- Raising farmer awareness and engaging with small scale farmers to establish an effective and targeted regional approach and to explore new business models;



Companion animals population management - DPM





- Shelter Quality
 - Active participation of four regional experts on Shelter Quality project activities.
- Be his hero!
 - Launched in 8 Coutries of the region (Albania, Bosnia&Herzegovina, Croatia, Kosovo, Bulgaria, Serbia, North Macedonia and Montenegro). RAWC collaborated with OIE on translation, printing and distribution of the materials, and a little bit more.
- Training of trainers on ICAM dog population management indicators



- 17 trainers trained

HUMANE DOG POPULATION MANAGEMENT GUIDANCE

International Companion Animal Management Coalition





ICAM Coalition

- ICAM Coalition formed in 2006
 - Discuss, share and learn...
 - Humane DPM guidance
 - Initial assessment prior to planning
 - No 'one size fits all'
 - Match intervention to local dog population dynamics

8 Impacts

- 1. Improve dog welfare
- 2. Improve care provided to dogs
- 3. Reduce dog density/Stabilise turnover
- 4. Reduce risks to public health
- 5. Improve public perception
- 6. Improve rehoming centre performance
- 7. Reduce negative impacts of dogs on wildlife
- 8. Reduce negative impacts of dogs on livestock



Before Talea

or how it can be done
without a modern mobile
apps, just some ordinary
tools.

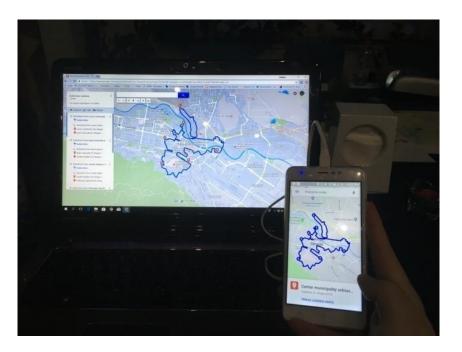


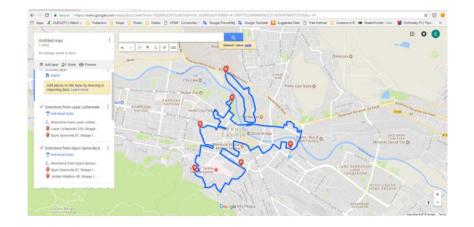
Before the streets...

- Route identification:
- Unbiased (randomly selected streets)
 - Should be planned by somebody who does not know andythign about the abovementioned hot spots.
- Hot spots (route with most dogs)
 - Should be planned by somebody who knows where and when dogs are there.

Digitalisation

- After the route identification, and due to the accuracy of the each next repetition it was needed to transfer the route to the GPS tracking program.
- In our case Google Maps





Survey

• For dog counting keep in mind that you have to go on the streets before the morning rush starts, because if you go later it will be harder to spot the dogs.

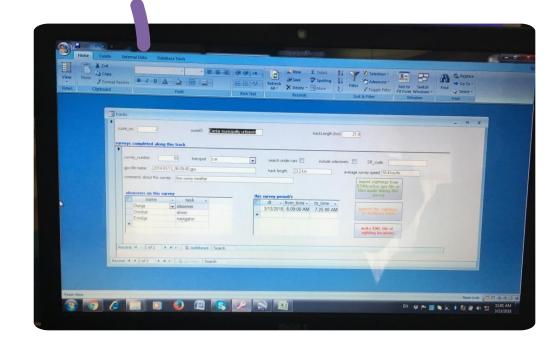
• Dogs in Skopje, beeing Balkan dogs, were mostly sleeping at that time.





Data processing

- After the collection, data needs to be evaluated and processed.
- In our case Microsoft Access form, with preordered formulas for calculation.





Next step – face to face interviews

KoBo Collect

Android phone – one folder

■ 49% 12:14 p.m. 12:14 p.m. 08/06/2018



Easy to question development, easy to use with a very proactive customer support.

Free program for questionnaire survey.

Data processing and results

- Face to face interviews gives us very good look at what is going on in specific area.
- What are the people toughs, and what mindset is on the streets.

General questions

V2 Updated D...

59% 1:59 p.m.

In the last month, have you been annoyed or troubled by a dog or dogs in your neighbourhood?

○ Yes

O No

Over the last 12 months, do you think there has been a change in the number of roaming dogs in your community, and if so, in what direction?

O Decreased

○ Stayed the same

General questions

V2 Updated D...

Do you or anyone in your home currently offer regular care, such as food, to a street dog that doesn't have an identifiable owner? ('regular' care means at least once per week)?

○ Yes

 \bigcirc No

Do you know anyone in your neighbourhood whose dog had puppies in the last 12 months? This can include puppies born within your own household.

Ensure the respondent can answer "yes" whilst still remaining anonymous, if it is their household who had the puppies

Dog identification and health



V2 Updated D...

Household dog (1)

Was your dog rabies vaccinated in the last 12 months?

○ Yes \bigcirc No O Don't know





Household dog (1)

Has your dog been given parasite medication in the last 4 months?

○ Yes

O No

O Don't know

Do not forget – ethics!

- The data we collect, the way in which we collect or use it may cause harm
- Harms may be direct or contingent
- Immediately evident or only apparent in the future
- Graded in severity mild/moderate/severe

■ 48% 12:14 p.m. O V2 Updated D... ► ▲ ...

* Is the respondent 18 years or older and given informed consent?

Hello, my name is X. I am conducting a survey to learn more about dogs in Skopje and I would like to ask you some questions. Would that be OK? ... To explain more about the survey, this information will be used to help the Centra municipality understand how best to manage dog populations here. I will not be asking vour name and the GPS location of vour home will be stored separately from your answers so there will be no way that someone could link your answers to you, you will remain anonymous throughout. Your involvement is voluntary and you can withdraw at any time. Would you be willing to take part?

○ Yes

 \bigcirc No

 \bigcirc No one home

On the field

- When entering properties, backyards or appartments, keep in mind:
- IF IT'S WIERD LEAVE.



RAWC DPM training and Talea app

Andreas Chaidousis, DVM

The training of DPM trainers

- Held from 5th to 8th of July 2022 in Skopje, North Macedonia
- Conducted by Elly Hibby, PhD, an Independent Animal Welfare Consultant and Scientific Coordinator to the International Companion Animal Management (ICAM) Coalition



• The training comprised theoretical courses, practical workshops as well as E-learning modules using an online platform and TALEA.







Welcome to the eLearning portal of ICAM

Featured courses

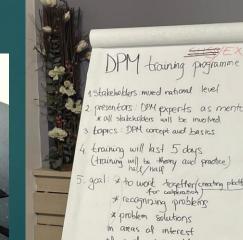


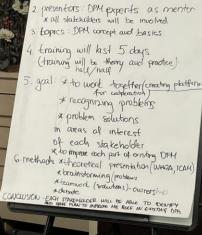






Development







Implementing DPM



• It also included daily population monitoring on the streets and surveying the general public regarding the roaming dog problem









The Talea app

Wise 🕵 Monkey 🛛

ANIMAL MANAGEMENT COALITIO

John Friar at

What is it? •

- Why do we do street surveys? •
 - Primary assessment
 - Monitoring
 - Evaluation •
- Relevance in the future the • arrival of new tools
 - Species Distribution Models
- Street Dog Sim (Dr. Andrew Yoak, Dr. Kellen Calinger, Dr. Elly Hiby)

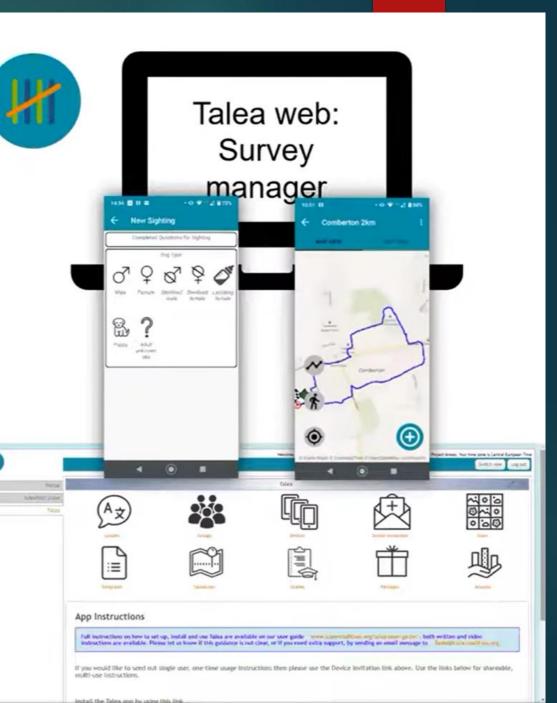
| CAN ERNATIONAL COMPANION AL MANAGEMENT COALITION | Co | Xact Current Pop | destructions 0 0 | 17800 | Population size |
|--|--|--|---|------------|--------------------------------------|
| | SlowGo | Dne Year Average Population Size | Year Month 1 1 | | Pupples Vacinated Year-Average |
| | adu-survival 0.70 | TargetMinimumAge | VaccineDuration 36 | Population | |
| | Ton Effort-Limiting | MonthlyCapturedNumber 150 WhenDoesManagementStart 60 | Target Population Capacity 20000 ReleasedDog% | | |
| | Ton Bounce-Ending | WhenDoesManagementEnd | S Uncatchable% S | -1 | Months 30 |
| linger, Dr. Elly | Sterilized Dogs Percentag | Population Demographics | 0.2 * XEA | | |
| | Time-to-90%-Rebound-post-int 0 Count Vaccinated Dogs | tervention % Under Six Months N/A Aver age Age (in Moni N/A | ths MapSelection | | |

How does it work?

Talea web and app

- Flexible
 - Templates: library, amend or create
 - Sandboxes:
 - » Routes or polygons
 - » Sighting location = observer location, or indicate animal location on map





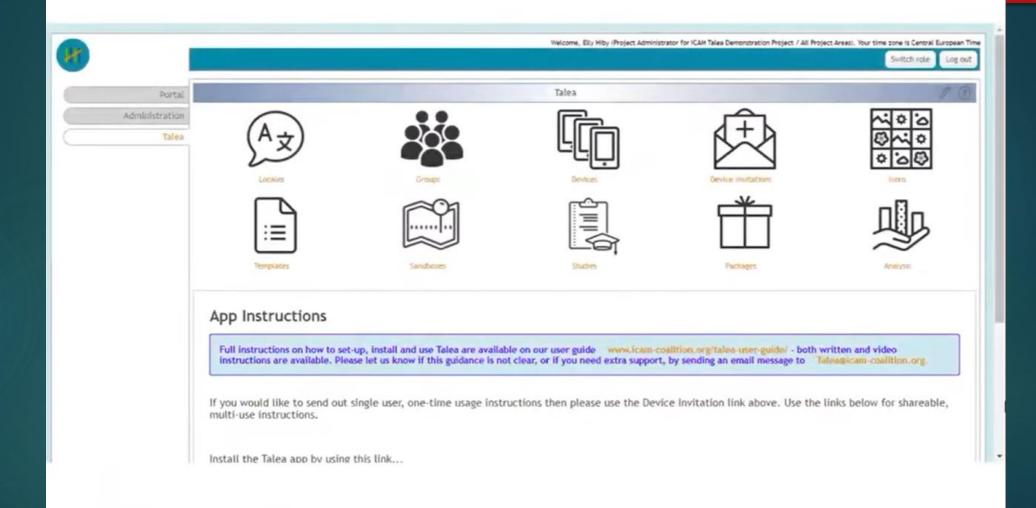
Talea web and app 14:34 🔟 🖬 🖼 • • • • 1 275% **New Sighting** ← Completed Questions for Sighting Easy Dog Type - Icons - Single tap Male Female Sterilise male 2 8 Adult Puppy unknown sex INTERNATIONAL COMPANION ۲ ANIMAL MANAGEMENT COALITION 4

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15:23 🖾 🗊 🖙 • • • 46 🖌 🗎 68% Talea web and app 14:34 🖬 🖬 🖼 Test package ← **New Sighting** ----MAP VIEW Completed Questions for Easy Dog Type - Icons - Single tap Male Female Sterilise male - Edit and delete B ? E. - Navigation and 'off route' indication Adult Puppy unknown sex - Any language Android only, not \bigcirc iOS K CAM ۲ ANIMAL MANAGEMENT COALITIO



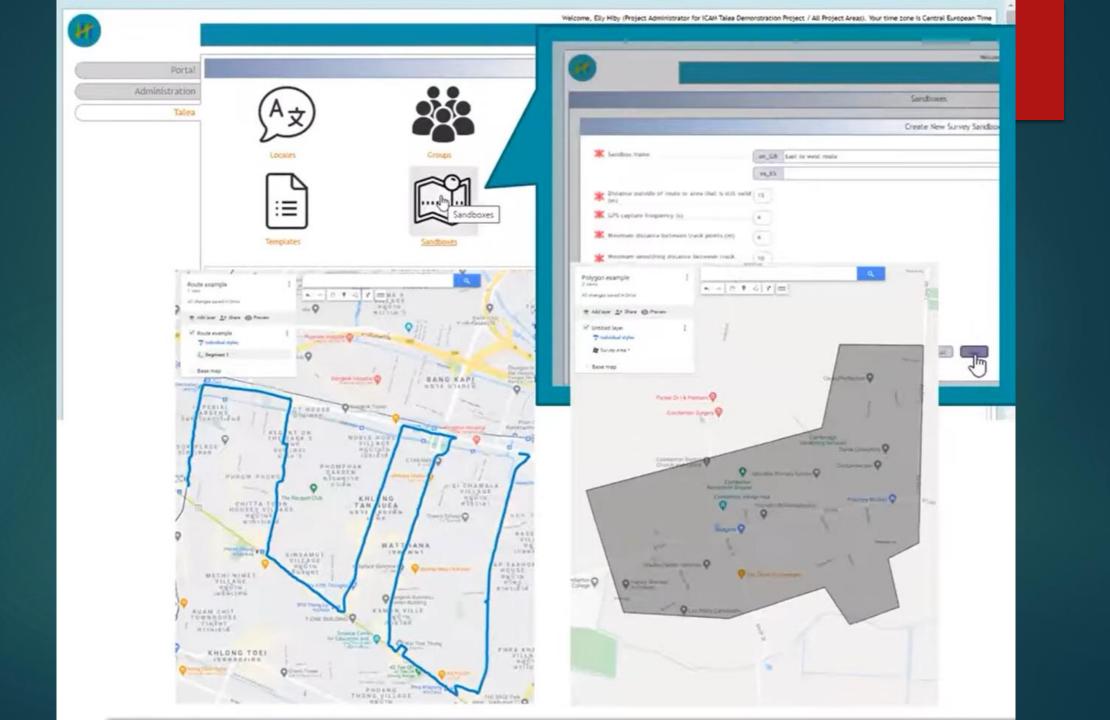


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| Administration | \cap | Espanol, Colombia (es_CO) | Ð | |
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| | | Hungarian, Hungary (hu_HU) | - | |
| | 60 | Georgian, Georgia (ka_GE) | | |
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| | | Portuguese, Brazil (pt_BR) | | |
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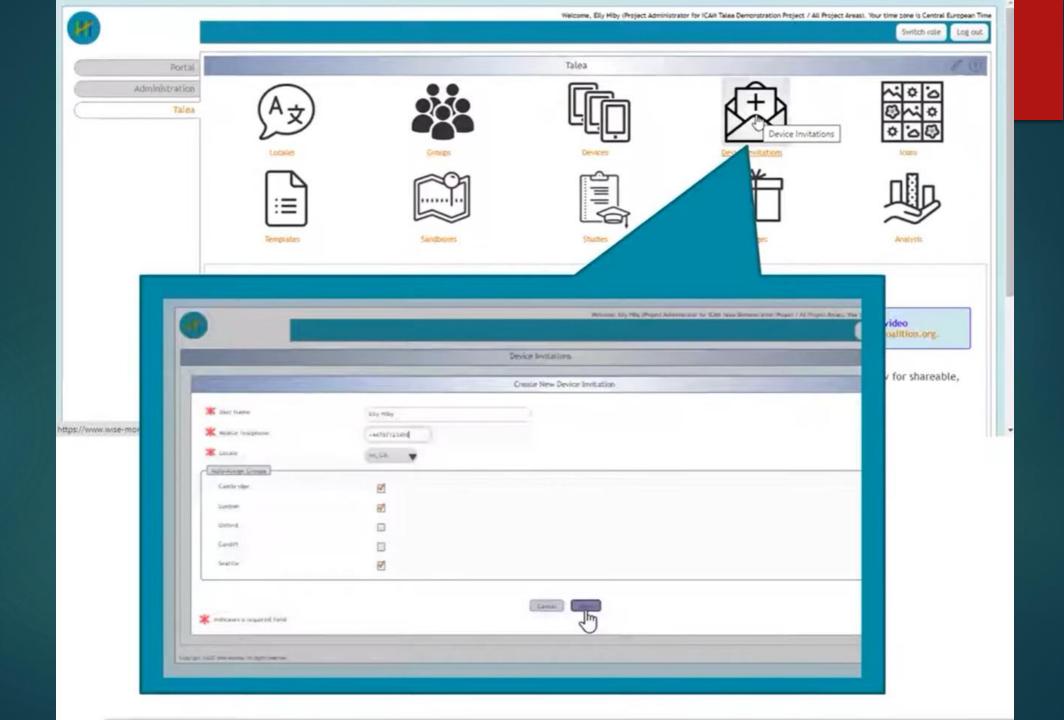
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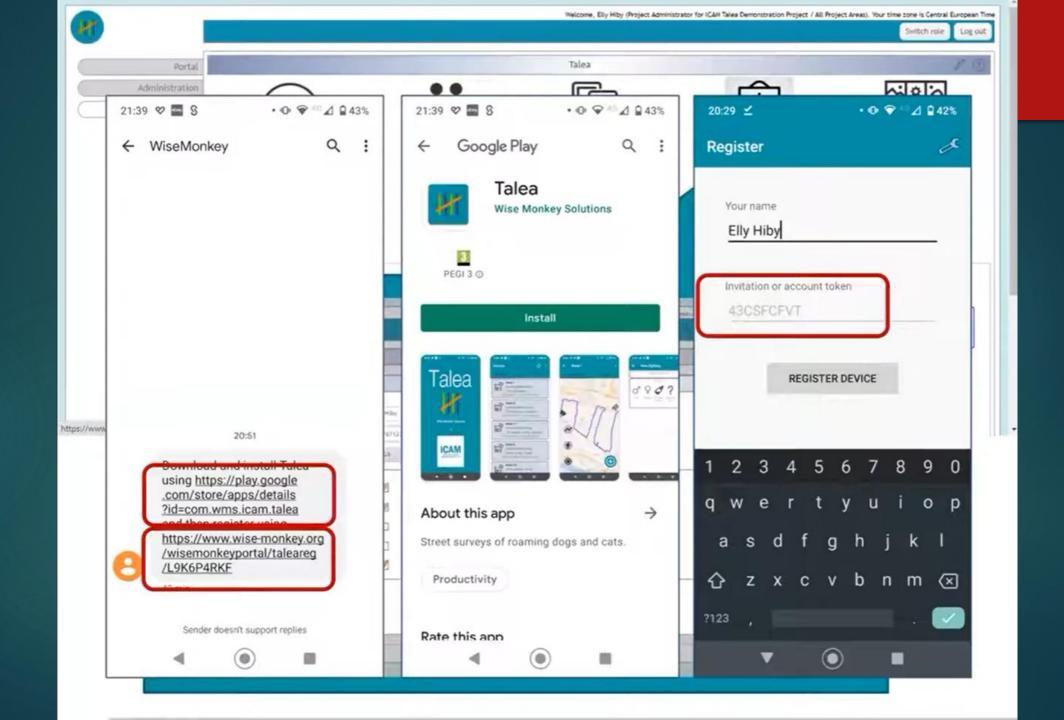
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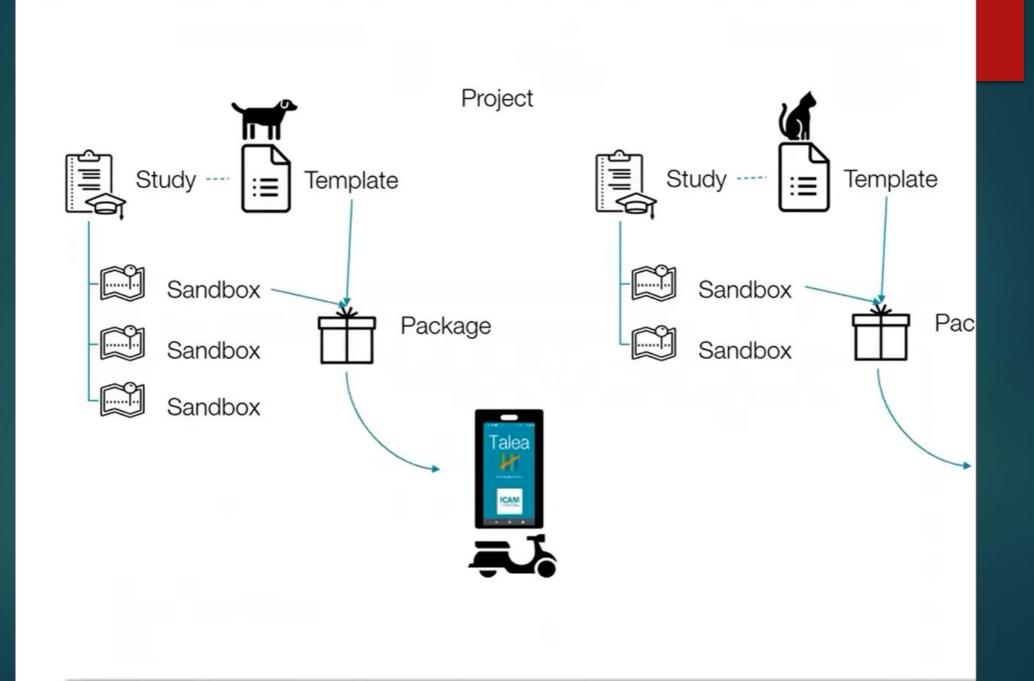




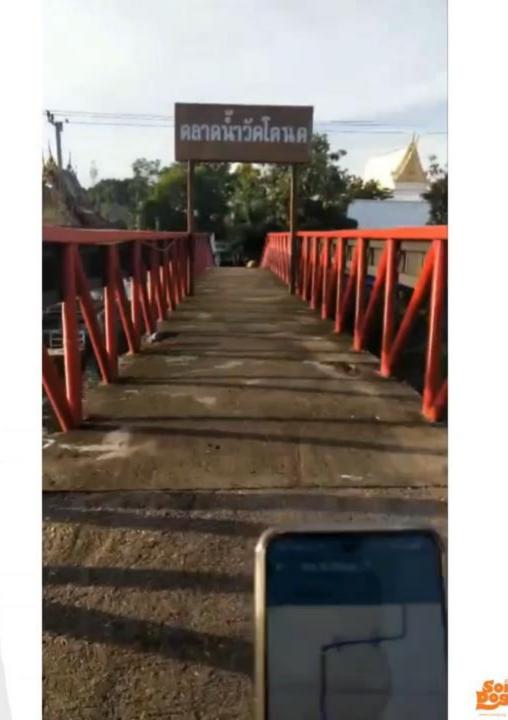
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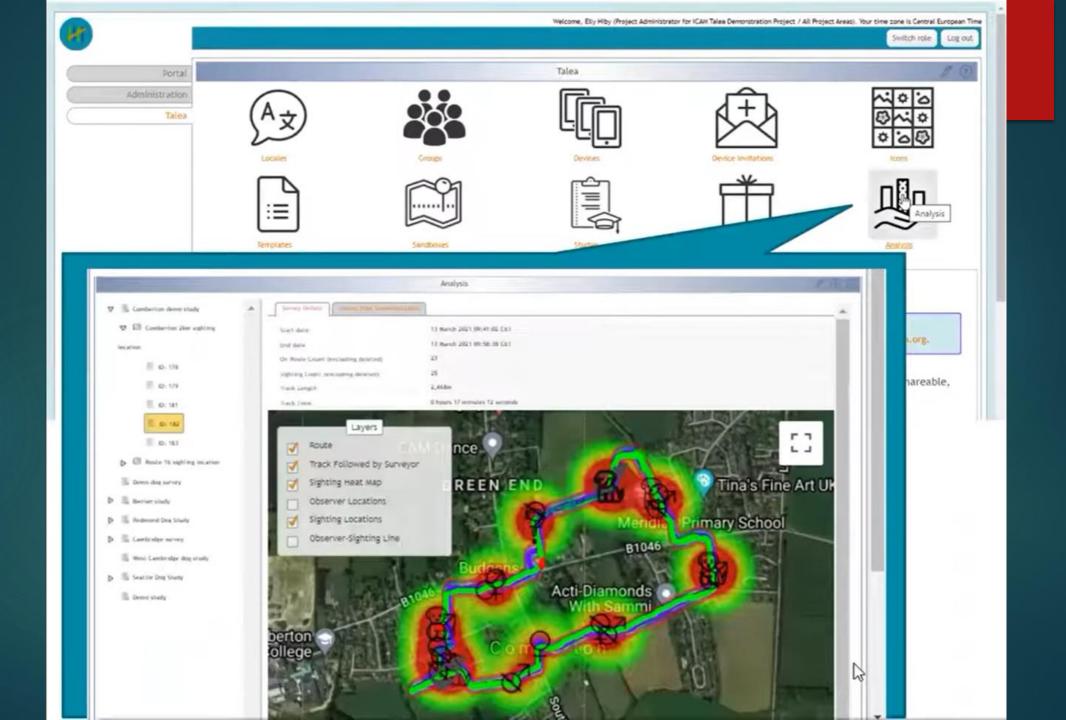


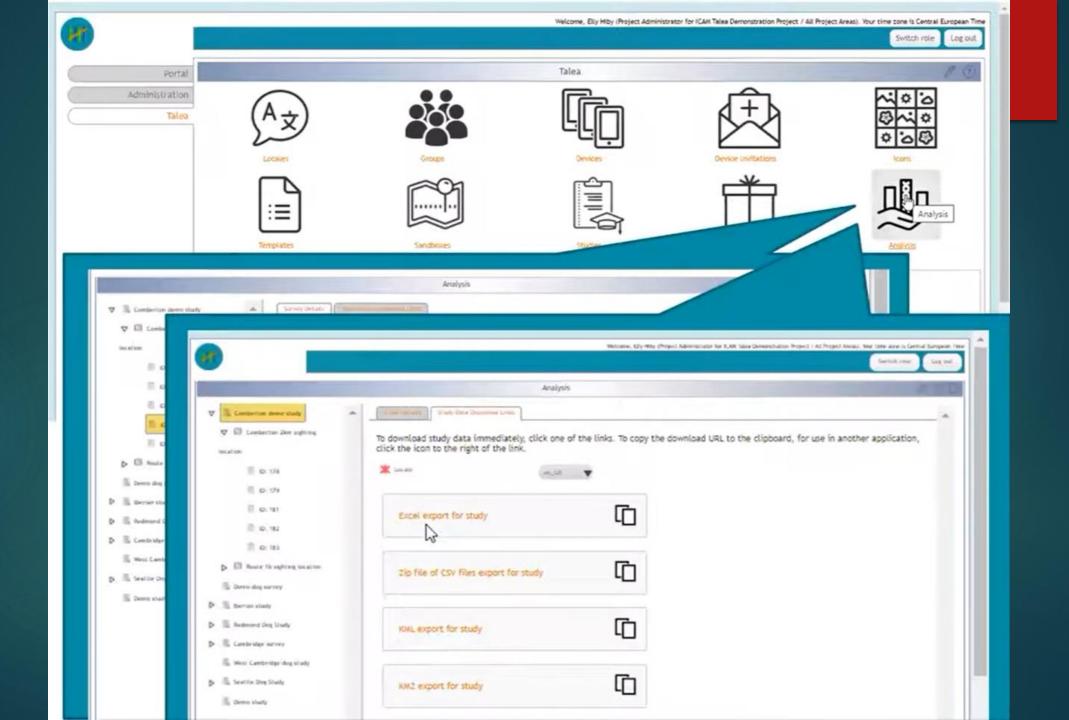
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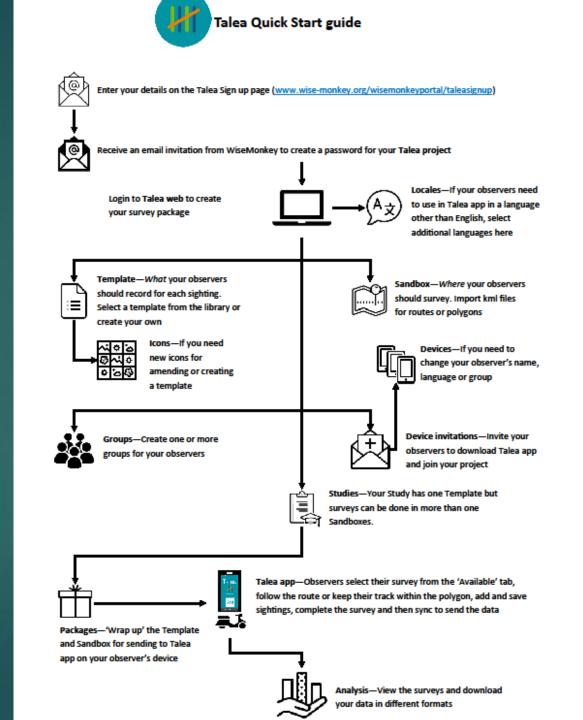


Survey in Route 17









Useful links

https://www.icam-coalition.org/talea-user-guide/



Search

1. How does Talea work

2. How to set up your Talea project

- 2.1. How to create a Talea project
- 2.2. How to add survey managers. Administration.

2.3. How to select what language your Talea app will use. Locales

2.4. How to group your observers. Group

2.5. How to invite new observers to your project. Device Invitations

2.6. How to change observer name,

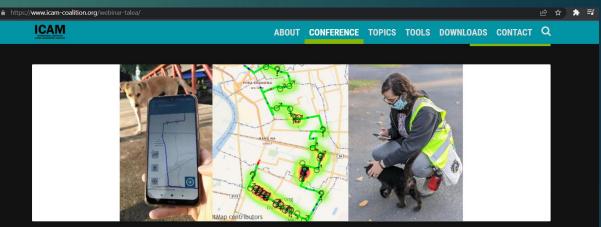
1. How does Talea work

Talea is comprised of two components:

- 1. Talea web: The web-based Project where the survey is created and surveyors are managed
- 2. Talea app: The mobile phone app where data is collected and submitted to the Project

The project manager is responsible for setting up and managing the Project. The webbased Talea Project must be set-up before observers are invited by the project manager to download the Talea app and collect data. The observers use the app to collect data using the Packages sent by the project manager to the app on their Device. Observers then submit completed surveys to the Project where the project manager can view, analyse and download the data.

https://www.icam-coalition.org/webinar-talea/



Talea street survey tool

Ambitions to survey your roaming dog or cat population? (Or any other species for that matter!) But don't know how to get started or record the data? Learn about ICAM's Talea web and app – our FREE survey tool:

This webinar is an introduction to Talea and examples of its use in the field. Please go to the **user guide** for more information on how to use Talea.

Elly Hiby (ICAM) Introduction to the webinar



Thank you!





RESULT OVERVIEW OF USING WVS APP IN FREE ROAMING DOG SURVEY





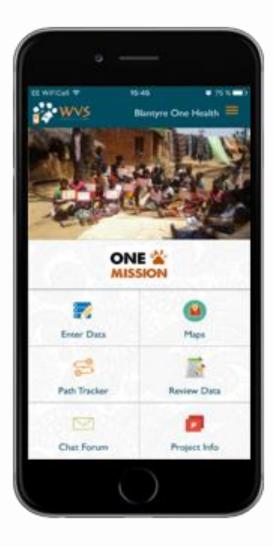


Monitorining and Evaluation in CNVR campaigns in BiH

WVS Support

The objective of the dog population evaluation was to assess the size and demographic, have information about dogs, of the free-roaming dog population in key project areas he outcomes of the survey serve as a benchmark from which to monitor changes in the dog population following the implementation measures to improve dog population management.

Provision of Training in Survey methodology and data analysis



List of Key Players



Government

The government is a key providing resources and support



NGOs

Non-governmental organizations are essential for providing services and advocacy, helping with pushing authorities with initiatives like this survey



Communities

Communities are the primary beneficiaries of CNRV campaigns, and their participation is essential.

These three key players are essential for maximizing outcomes with M&E in CNRV campaigns.

| | | Canto n | Metric 2 | Survey Dates 12-13 | Total Surveys | Toral sightings | Invalid GPS |
|---|-------------------|------------------------------|-------------------|-------------------------------------|------------------|--------------------|----------------|
| | | | Bihać | May '22 | 18 | 337 | 11 |
| 2022 Six municipalities | Federacija BIH | Una Sana Canto | Bosanska Krupa | 12-13 May '22 | 10 | 649 | 0 |
| two days in April, two days in May, one day in June | | n | Sanski Most | 12-13 May '22 | 17 | 392 | 51 |
| one day in June | | | | | | | |
| 1800 dogs 56 surveys Republika Srpska | | | Ključ | 12-13 May '22 | 6 | 177 | 0 |
| | | Bosnia Podrinje Kanton | Goražde | 9 June '22 28-29 April '22 | 3 | 91 | 0 |
| | • | Bijeljin a | Lopare | | 2 | 154 | 0 |
| | Total | | | | 56 | 1800 | 62 |
| | | | | | | | |

Timeline of survey

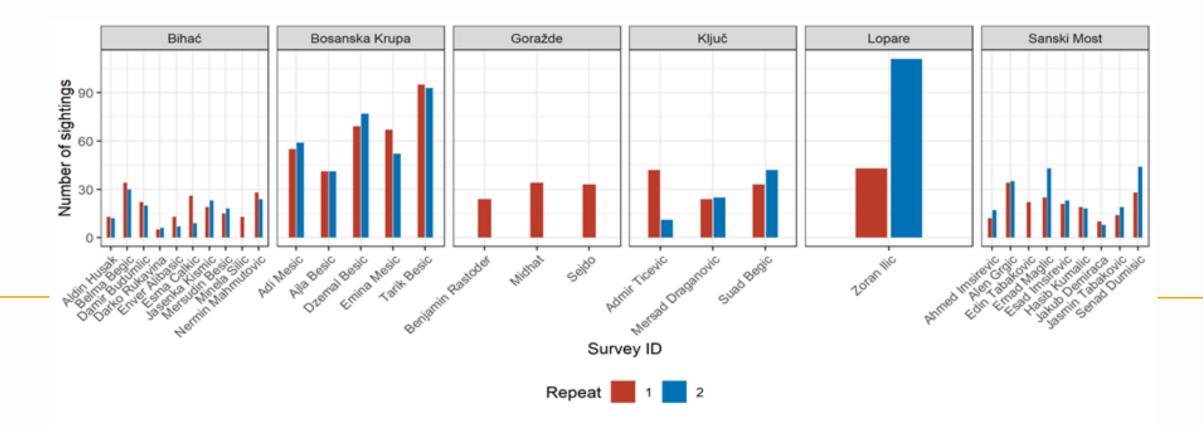
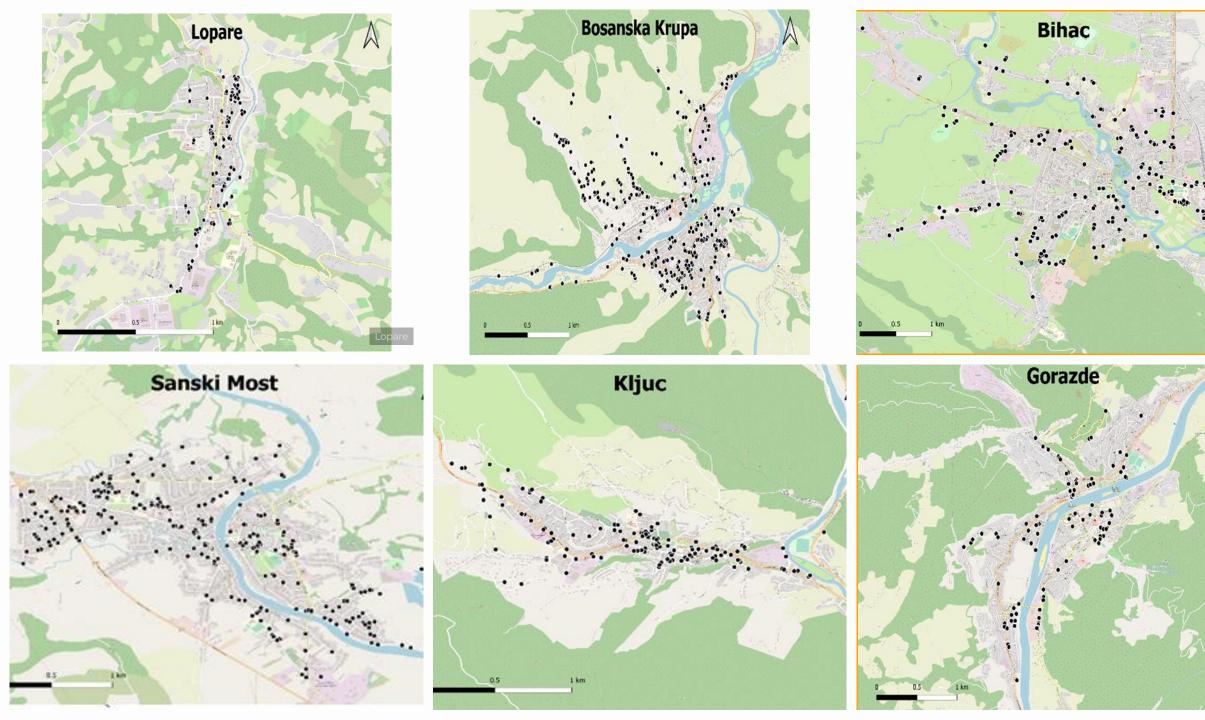


Figure 2 – Dog sightings per survey, by municipality and user. Most surveys were repeated as indicated by a red (first survey) and blue (second survey) bars.



A

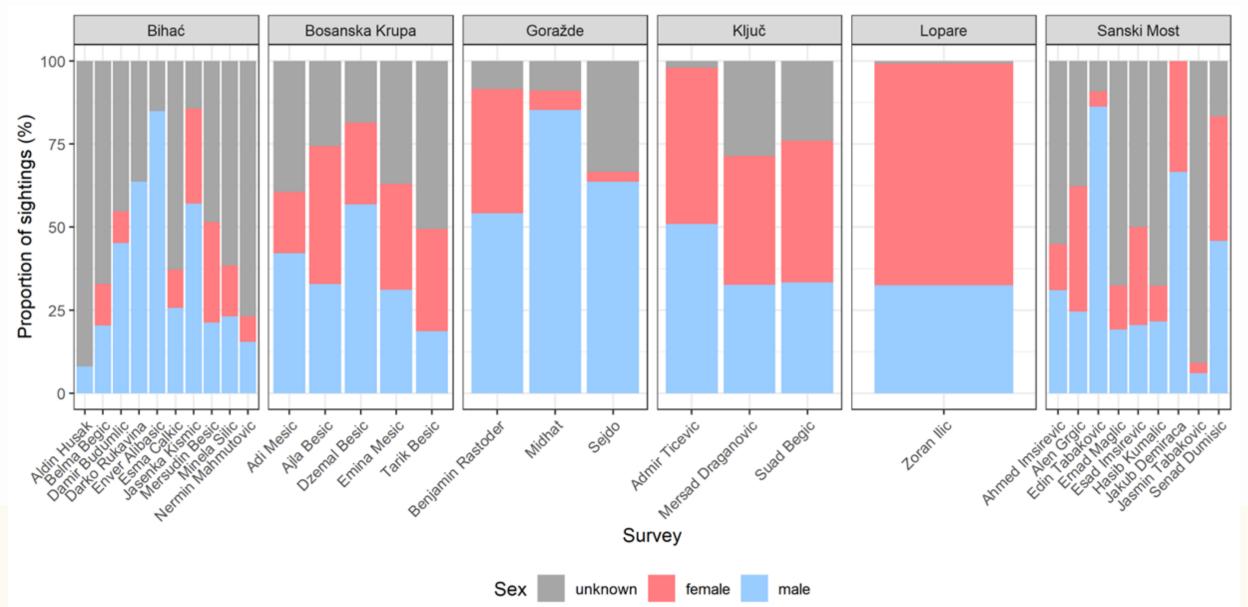
Population Estimate

Dog population estimates in mapped survey zones based on abundance and upper / lower detectability

| Location | Mean abundance (dogs / km) | Region road length (km) | Estimated dogs | Detectabilit y 0.6 | Detectabilit y 0.4 |
|-------------------|-------------------------------|----------------------------|-------------------|-----------------------|-----------------------|
| Bihać | 4.2 | 173.7 | 736 | 1227 | 1840 |
| Bosanska Krupa | 8.8 | 60.7 | 531 | 886 | 1328 |
| Goražde | 5.9 | 89.5 | 531 | 884 | 1326 |
| Sanski Most | 7.4 | 67.1 | 499 | 832 | 1248 |
| Ključ | 7.9 | 19.4 | 153 | 255 | 382 |
| Lopare | 14.4 | 10.2 | 147 | 245 | 367 |

"Measuring outcomes is the key to maximizing them."

Charting Data from the app that were entered in forms

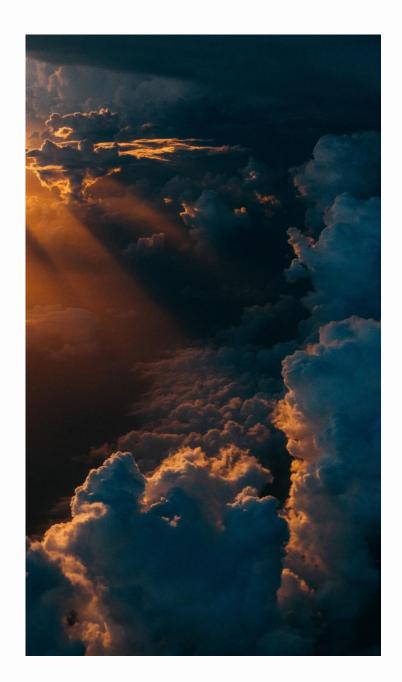


Why is it important?

To inform the public, people from municipalities, and DTW of the impacts of the intervention

To compare interventions and their relative impacts, and plan future ones We are lucky to have cooperation with WVS who trained and help us

This tool is available as Thalea app, each is user friendly and can provide training



How did we do it?



Municipalities and cities Colaborate and ask for support



Who are those people taking photos of dogs and walking with their phones at 5 am?

Volounteers, can be NGO, local vets, veterinarians,vet students



Organisation

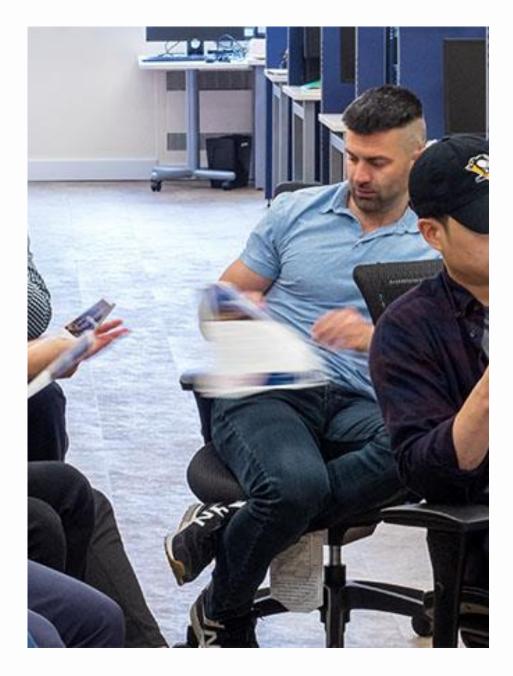
One person who is coordinating (person in charge) with destkop version and acess to internet, and people who are doing surveys dont need internet just phone and app

By strengthening the data collection processes, CNRV campaigns can maximize outcomes, but also other DPM interventions

Preparing Staff for the First Day: Planning and Training for Success

Planning ahead is essential for any successful project. Training staff on the first day ensures that everyone is on the same page and knows what their responsibilities are.

First coordinator must be trained or go trough the app and make routes and users ID s and after train also all the users who are going to conduct the survey



DOGS TRUST BOSNIA PROGRAMS:

- 1. CNVR
- 2. VTP
- 3. DOG SCHOOL
- 4. FOSTERING
- 5. EDUCATIONAL WORKSHOPS OF CHILDREN
- 6. PUBLIC EVENTS AND PROVIDING PUBLIC EDUCATION ON RESPONSABLE OWNERSHIP



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PASA

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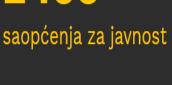
51



108 medijskih kampanja







- From 2022 we changed a bit approach to CNVR
 Programme deciding to work more with local communities
- In 2022 a part of DPM training in Skopje were as one of he s the importance of monitoring and evaluation
- Implementing DPM (ICAM learning) great tool for different stakeholders
- Thalea and WVS app easy and free tools that can help estimate sucess of different DPM interventions that are in DPM action plans

Thank you for your attention!



Dinarević Anida, DVM E-mail: anida.dinarevic@dogstrust.ba