



Animal welfare for a better world

Innovations and technologies: Improving responsible management of pets

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Overview

1. ICAM background and guidance materials
2. Challenges in pet population management
 - Community conflicts
 - Selecting the best strategy
 - Monitoring and evaluation
3. Humane Community Development, an integrated approach to achieving best practice

International Companion Animal Management (ICAM) Coalition



- Formed in 2006
- **Discuss** current research, **share** experiences, **learn** from successes and failures
- **Guide** best practice in humane dog and cat management programs
- Supports implementation of OIE guidelines





Best practice recommendations

1. Form a multi-stakeholder committee
2. Use data to understand the problem
3. Address the cause, not the symptoms
4. There is no one-size-fits all solution



Challenge 1: Can we agree on the problem?

- Passionate disagreement
- Simple answers to complex issues
- Mistrust between NGOs and governments
- Lack of funding and dependence on external aid

Your shelter isn't the answer, my sterilization campaign is!

We want to be self-sufficient, but what are you going to give us?

If you're working with that group, we can't trust you.

Challenge 2: Collecting and understanding useful data

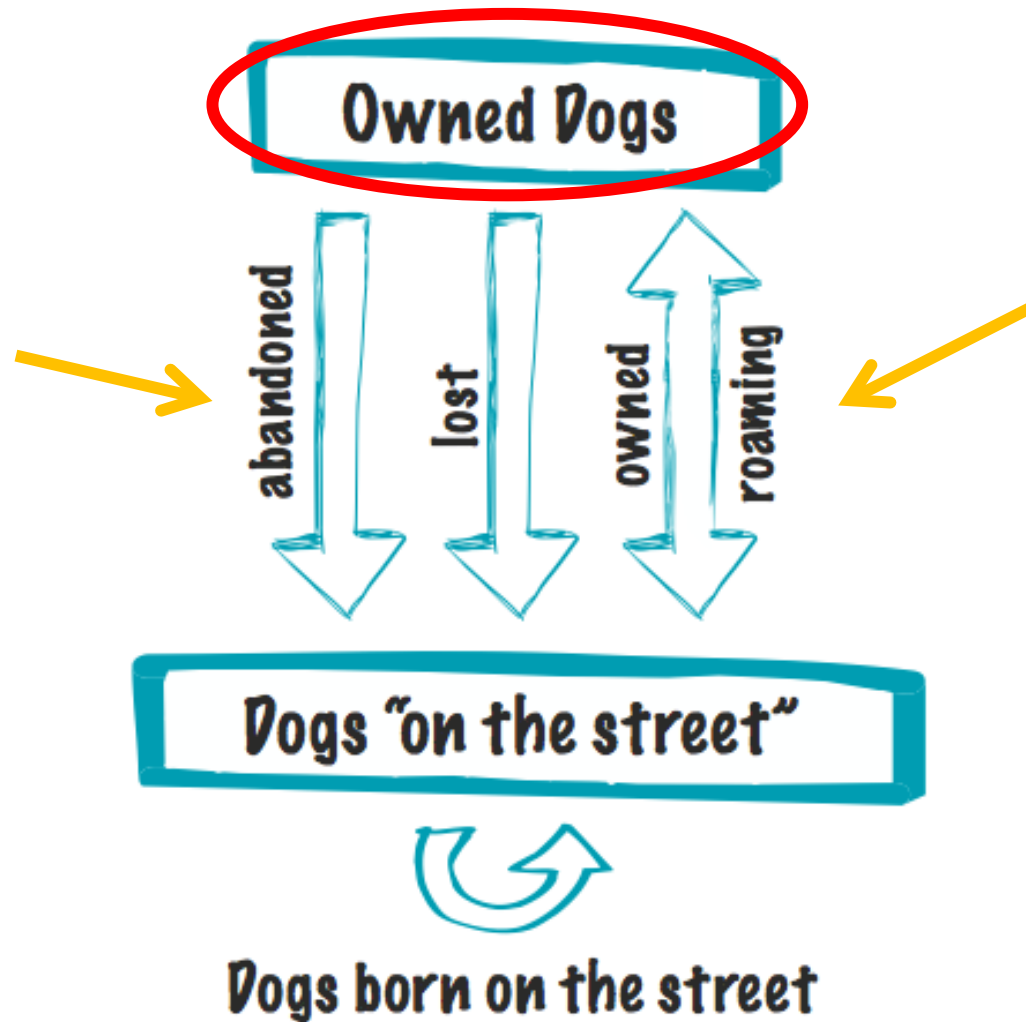


- Impacts
- Indicators
- Method of measurement
- Tailored recommendations

Where are they coming from (and what should we do about it)?

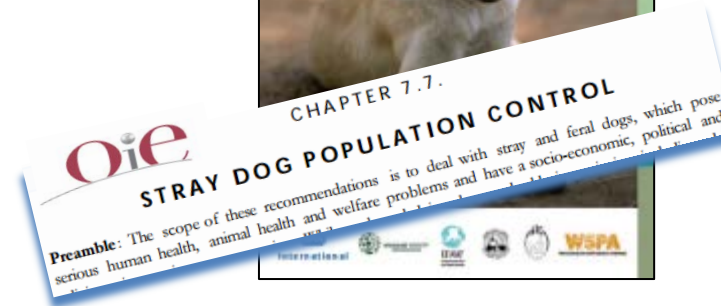
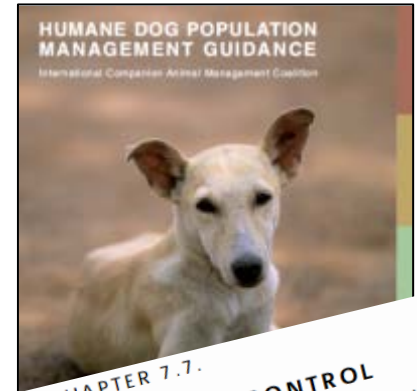


Where are they coming from?

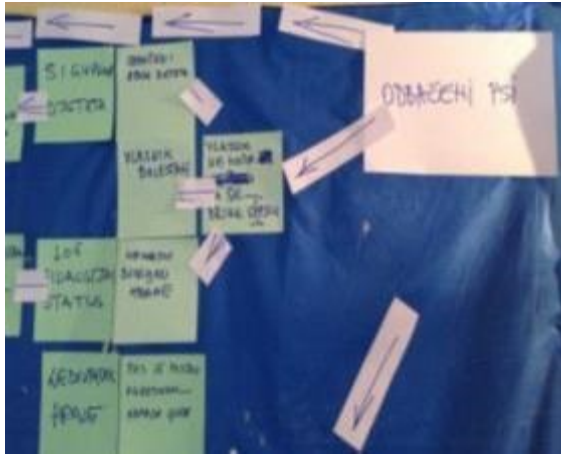


Challenge 3: What will really fix the problem?

- Usually several intervention “tools”:
 - Sterilization/Contraception
 - Sheltering and holding centres
 - Legislation
 - Education
- Depends on the definition of the problem
- Each community is unique
- **There is no “ perfect model” intervention**



Humane Community Development



Humane Community Development

Stakeholder
engagement

Workshop 1:
Building a
Humane
Community

Data Collection

Workshop 2:
Humane
Community
Action Planning

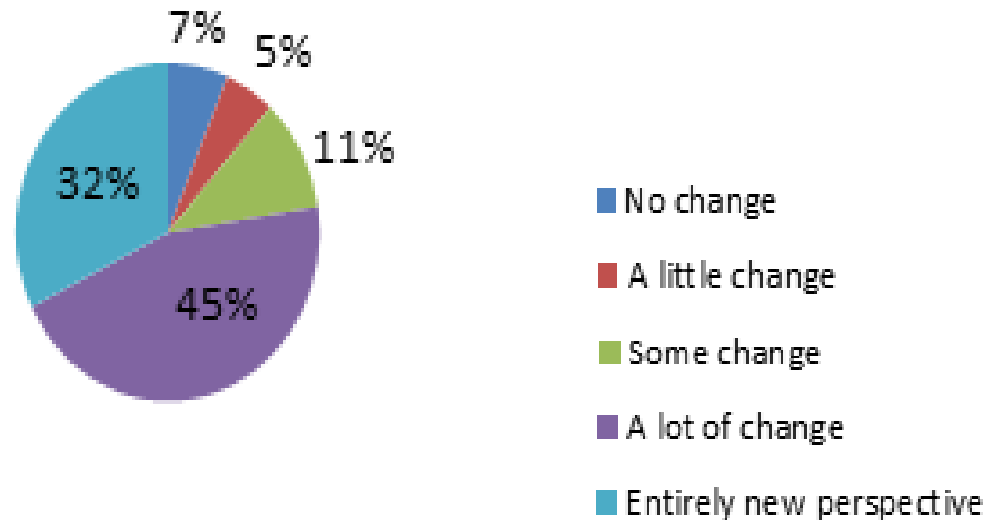
- Build consensus amongst stakeholders
- Focus common efforts using accessible data
- Create a sustainable, local management plan

Building A Humane Community Workshop

teachers
ICRC breeders
farmers rescuers
police veterans
disabled
elderly hunters
hoarders nurses
municipality



How have your ideas changed about the problems with dogs? (n=83)

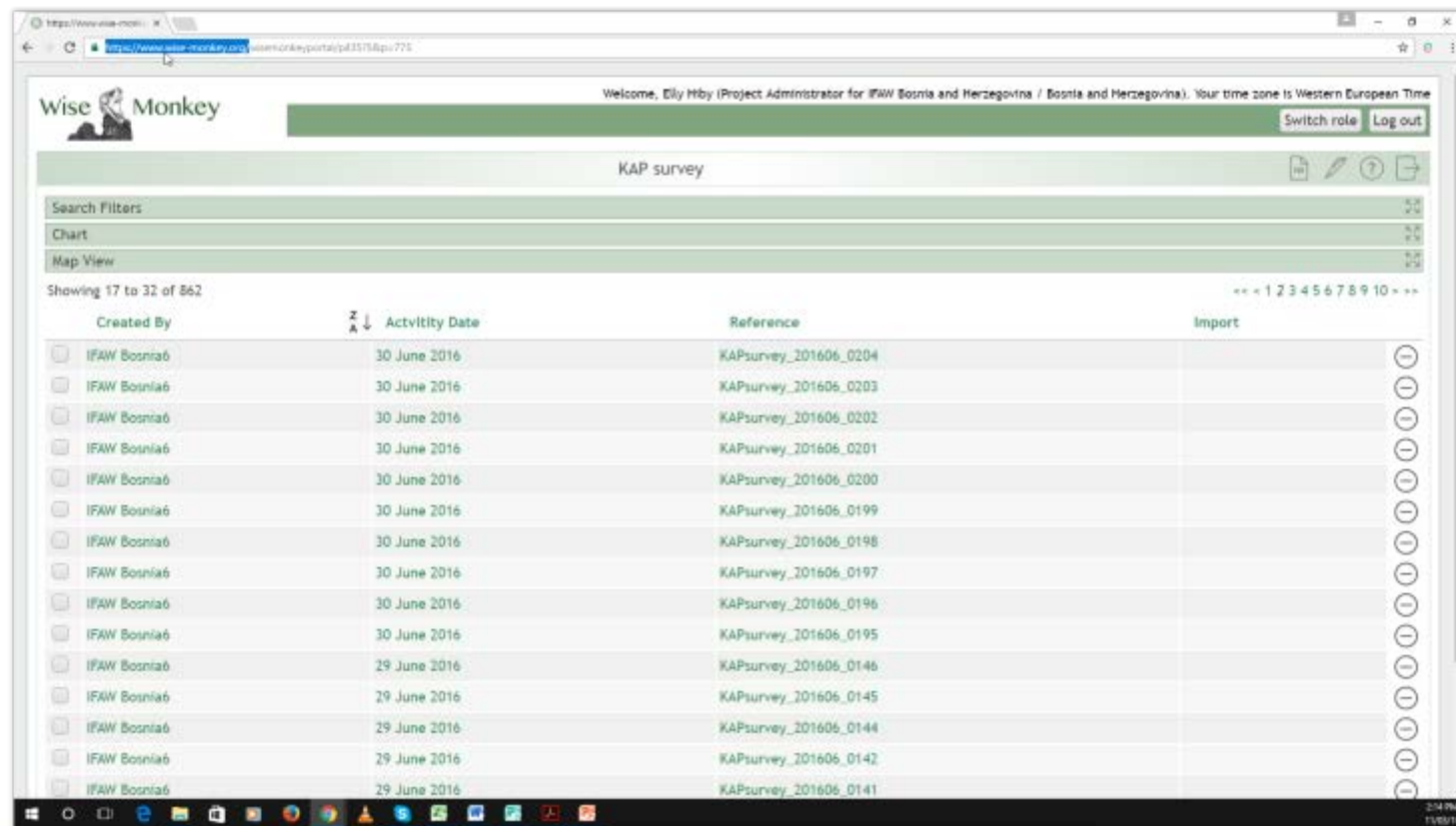


Data capture: Community survey on knowledge, attitudes, behaviors and owned dog welfare

Device Magic: Offline data collection with cloud-based upload when wifi is available



Data storage: Wise Monkey cloud-based data collection system



The screenshot displays the Wise Monkey web application interface. At the top, there is a navigation bar with the Wise Monkey logo, a user greeting for 'Eily Hby', and buttons for 'Switch role' and 'Log out'. Below this is a header for the 'KAP survey' with icons for search, edit, and refresh. A sidebar on the left contains 'Search Filters', 'Chart', and 'Map View' options. The main content area shows a table of survey data with columns for 'Created By', 'Activity Date', 'Reference', and 'Import'. The table lists 17 records, all created by 'IFAW Bosnia6' between June 29 and June 30, 2016. Each record has a unique reference ID and an 'Import' column with a minus sign icon.

Created By	Activity Date	Reference	Import
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0204	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0203	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0202	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0201	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0200	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0199	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0198	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0197	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0196	⊖
<input type="checkbox"/> IFAW Bosnia6	30 June 2016	KAPsurvey_201606_0195	⊖
<input type="checkbox"/> IFAW Bosnia6	29 June 2016	KAPsurvey_201606_0146	⊖
<input type="checkbox"/> IFAW Bosnia6	29 June 2016	KAPsurvey_201606_0145	⊖
<input type="checkbox"/> IFAW Bosnia6	29 June 2016	KAPsurvey_201606_0144	⊖
<input type="checkbox"/> IFAW Bosnia6	29 June 2016	KAPsurvey_201606_0142	⊖
<input type="checkbox"/> IFAW Bosnia6	29 June 2016	KAPsurvey_201606_0141	⊖

Data analysis: EpiInfo visual dashboard

The screenshot displays the EpiInfo software interface. The main window is titled "Analysis" and shows a data source "KAP_survey_4 July 2016 Testdata for VDKAP survey\$ (Records: 95)". A central window titled "epiinfo™" is open, showing the "ANALYZE DATA" section with the "VISUAL DASHBOARD" option selected. The dashboard includes options for "CREATE FORMS", "ENTER DATA", "CREATE MAPS", "STATCALC", "CLASSIC", and "VISUAL DASHBOARD".

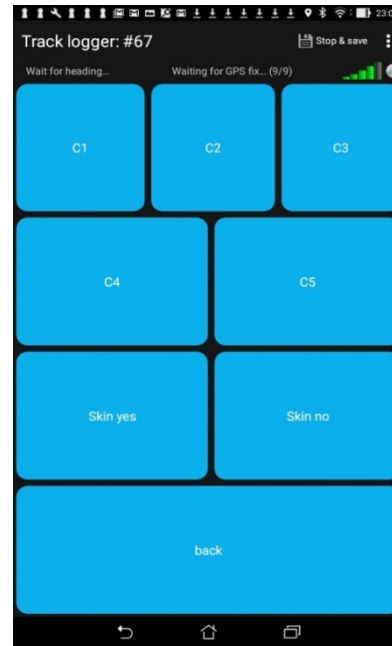
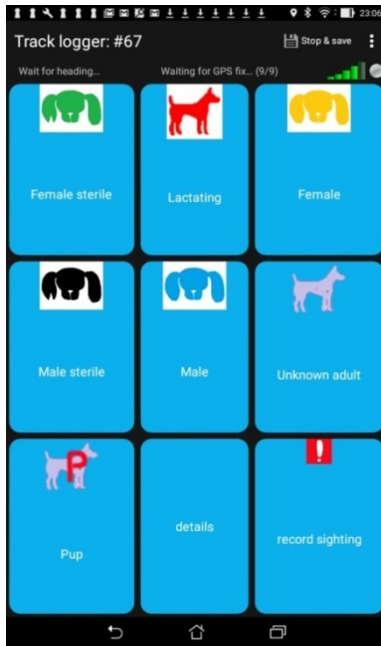
The "VISUAL DASHBOARD" window displays a frequency table for the question "Which animals do you use? (Dog)". The table shows the following data:

Which animals do you use? (Dog)	Frequency	Percent	Cum. Percent	Exact 95% UCL	Exact 95% UCL
Yes	95	100.00 %	100.00 %	96.19 %	100.00 %
TOTAL	95	100.00 %	100.00 %		

The interface also shows a "Data Filters" window on the right, which is currently empty. The bottom status bar indicates "Records: 95" and "Fields: 131".

Roaming dog hotspot monitoring

OSMtracker smart phone app with layout specifically designed for dog surveys



Data storage and analysis: dog hotspot monitoring

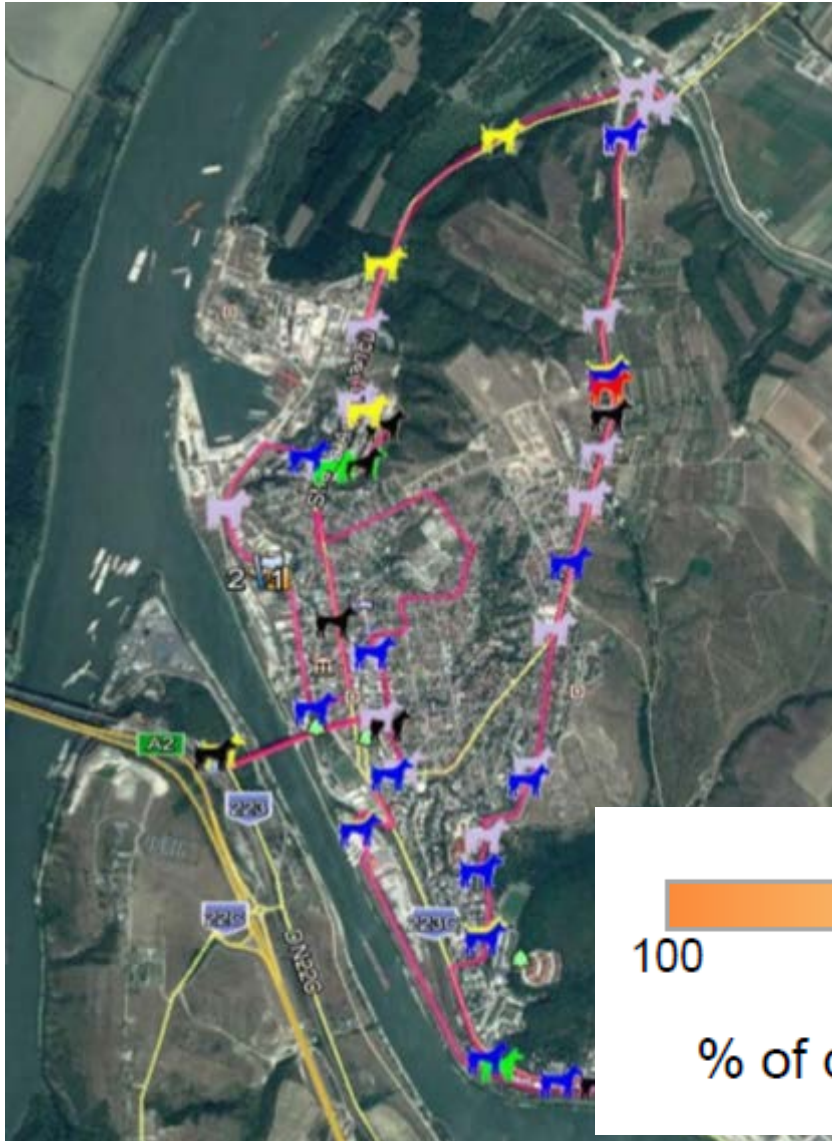
Access database which parses data output from OSMtracker and provides previously designed queries for analysis

The screenshot shows a web application interface for dog hotspot monitoring. The interface is divided into several sections:

- Sidebar:** A 'Dog Density Browser' menu with options like 'search track and survey details and report data from phone', 'add census route', 'view logs per track and survey', 'view logs per day by track and survey', 'add tracking estimate by track', 'view attribute frequency by track and survey', 'view survey status', and 'plot geographic analysis'.
- Main Content Area:** A search and filter interface with fields for 'trackID', 'trackLength', 'survey number', 'start/end time', 'include address', 'V1 lock', and 'go by name'. Below this is a table titled 'observers on this survey' and a 'Run survey period' section.
- Table:** A table with columns for 'trackID', 'survey', 'survey starting', 'dog type', 'count', and 'percentage'. It lists various survey entries with details like date, time, location, and dog characteristics.

trackID	survey	survey starting	dog type	count	percentage
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Female	0	0.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Female sterile	0	0.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Lactating	1	1.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Male	3	3.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Male sterile	0	0.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Pup	0	0.00
Gradiacac-Singo-016	7	11/08/08 7:00:00 AM	Unknown adult	1	1.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Female	2	2.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Female sterile	0	0.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Female sterilized	1	1.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Lactating	1	1.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Male	3	3.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Male sterilized	1	1.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Male sterile	0	0.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Pup	7	7.00
Gradiacac-Dunee-016	8	11/08/08 9:00:00 AM	Unknown adult	2	2.00
Gradiacac-Lake	8	11/08/08 9:00:00 AM	Female	1	1.00

Planning workshop: Data use in decision-making made simple



% of dogs tethered for either 12+ or 24 hours

Humane Community Development

**Project
Launch**

Local Plan in Action

**Workshop 3:
Monitoring,
Evaluation and
Adaptation**

- Community engaged with locally-tailored plan
- Local resources accessed
- Data collection technology for future decision-making

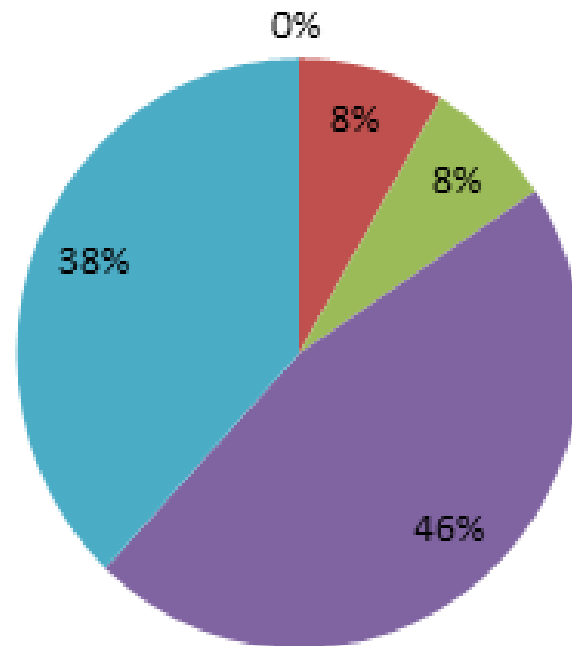
Local humane community strategies



- Humane values
- Local creativity and energy
- Collaboration, not blame
- Utilizing what is already there



Post-planning: Stakeholder confidence that dog situation will improve (*n=108*)



- 1 – Things will probably not improve
- 2 – Improvements are possible but not likely
- 3 – improvements are possible, and may happen
- 4 – improvements are possible, and probably will happen
- 5 – I really think things will improve

Early outcomes in 7 communities

- 900+ dogs treated/sterilized by local vets in upgraded facilities
- 1700 children engaged in education programs
- 270 participants from diverse gender, age and economic status
- Ongoing data collection

None of this performed by external groups



Humane Community Development with integrated data collection and analysis

- ✓ Can we agree on the problem?
- ✓ Can we decide what to do about it?
- ✓ Are we addressing the source of the problem as well as symptoms?
- ✓ Do we know if we are being effective?



Thank you

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