Developing a comprehensive stray dog control strategy

Alexandra Hammond-Seaman

RSPCA International

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RSPCA mission

‘The RSPCA will, by all lawful means, prevent cruelty, promote kindness to and alleviate suffering of all animals’

RSPCA International....

Where? → **East Asia**

Europe

Africa

What?

Advice

Training courses

Links to organisations

Support

How can RSPCA help

Support initial dog population assessment and community surveys.

Work with the key stakeholders to develop targeted and comprehensive intervention measures.

Provide advice and technical assistance for the competent authorities and DPM programme managers.

Deliver catching and handling and shelter training for municipal staff, service providers, veterinarians and NGOs.

Support awareness raising and education activities.

Background

ICAM Coalition formed in 2006

Discuss, share and learn...

But what is really making a difference?

Indicators project

To develop guidance on monitoring and evaluation of DPM that supports us to track progress, learn and subsequently improve impact through the use of measurable indicators

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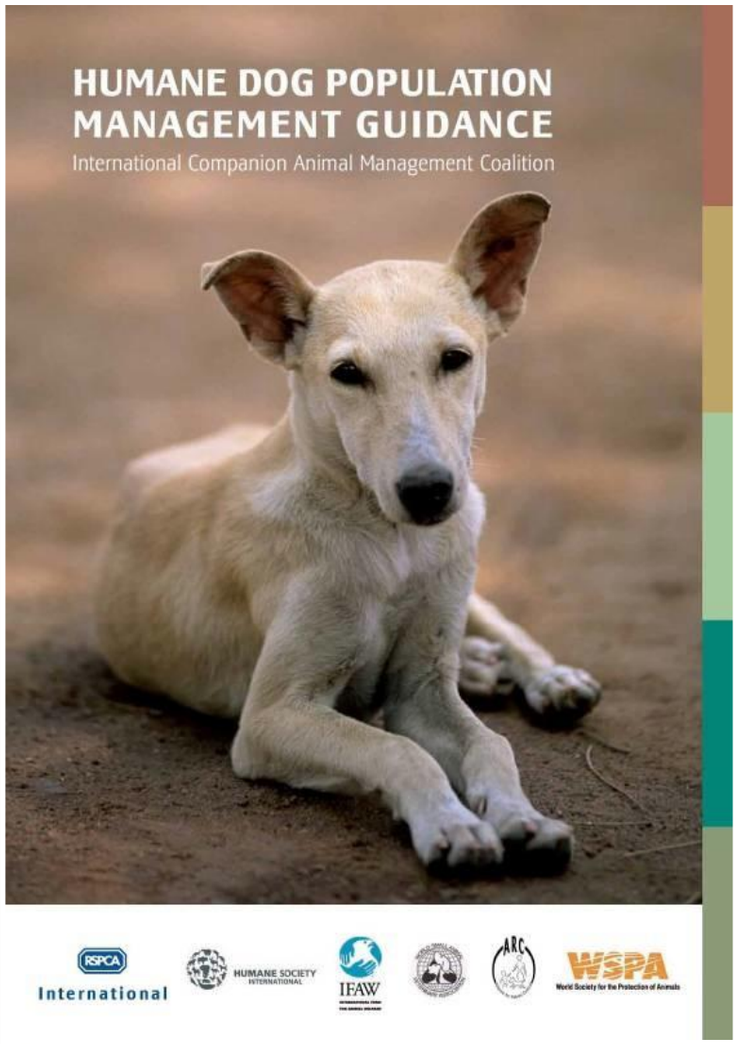


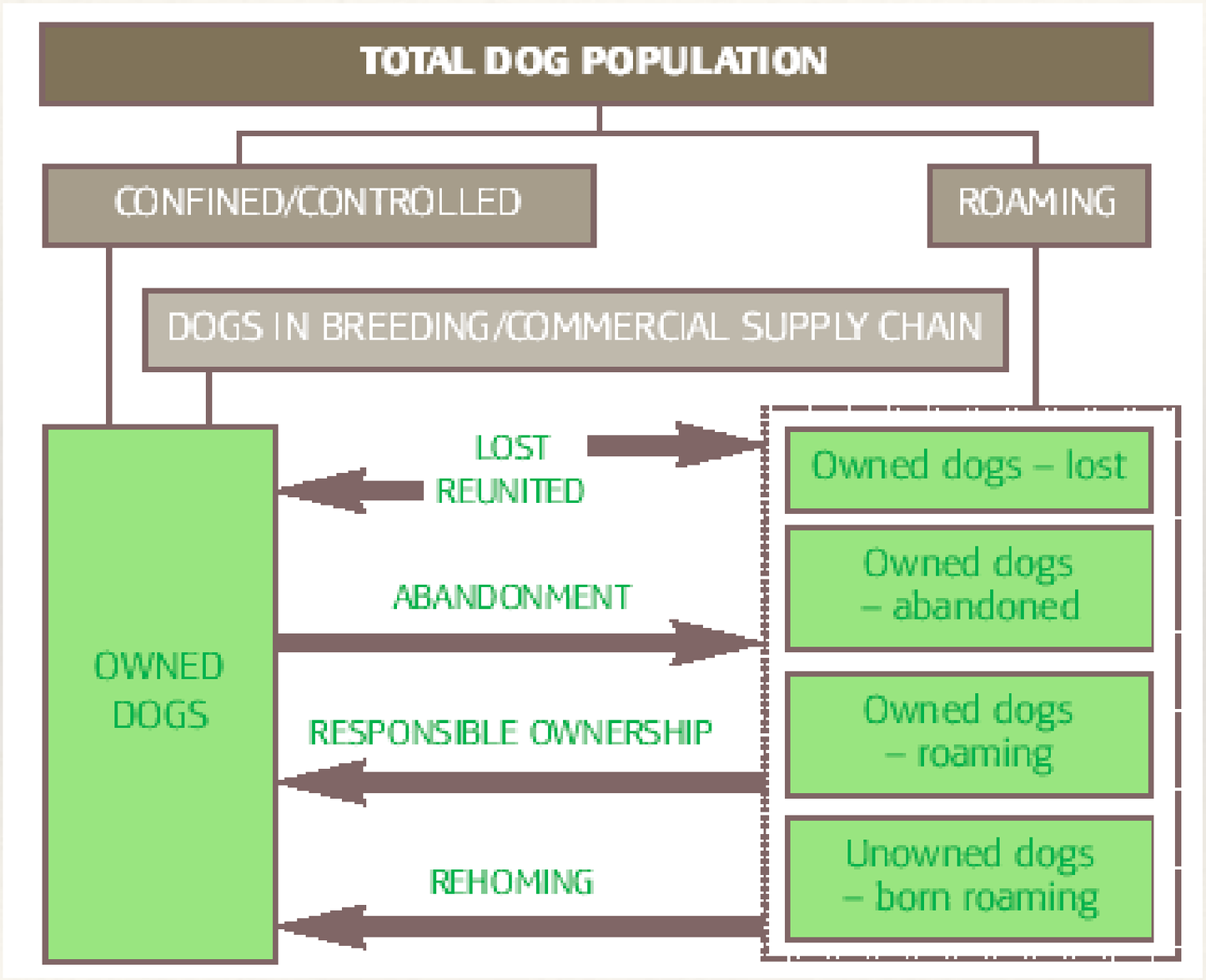
HUMANE DOG POPULATION MANAGEMENT GUIDANCE

Available in:

English, Spanish, Portuguese, Russian, Mandarin and Thai

Dog population management

One size does not fit all



ICAM, 2007

Dog population management

Targeting the source

Dog population management
Where do they come from?

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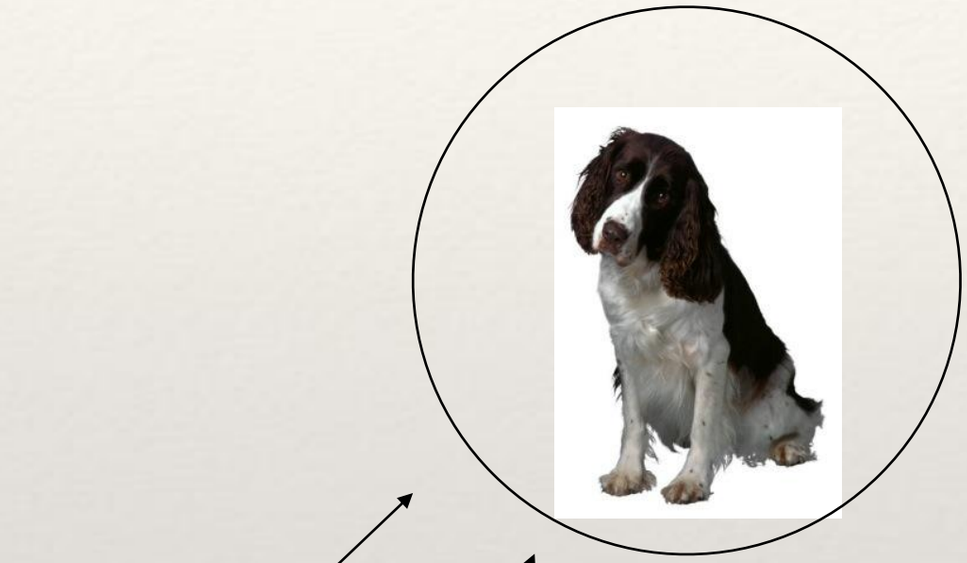
Where are the dogs coming from?

- the make-up of the roaming dog population

- the source(s) of the roaming dogs



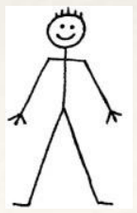
Owned roaming

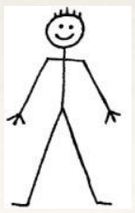
Abandoned

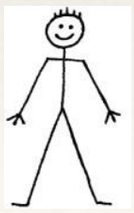
Lost

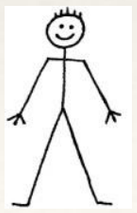
‘community dog’

‘stray’ born on street









What do we need to know (dogs):

- Number of dogs on the street
- Dynamics of the ‘stray’ population (owned vs stray, welfare, sex, age, *females lactating/pregnant*, puppies)
- Resource access: what keeps the dogs alive and reproducing
- Size of owned dog population

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Identifying the problem
Initial assessment

Management strategies should aim to target the source of the ‘problem’ and not only treat the ‘symptoms’

-What is the current size of the population and what are the characteristics of the specific dog population.

- Where are the dogs coming from? Where are these sources? What is the level of commercial and ‘hobby’ breeding?

- What are the problems perceived and what is currently done to control these problems?

- Who is responsible for this control?

- Who are the relevant stakeholders?

- What is the prevailing public opinion/attitudes to this issues? What people think/what people do?

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What do we need to know (people):

ABOUT PEOPLE

- Public Attitude (What people think, what people want)
  - Public attitudes toward strays? Toward their own dogs?
  - *Public awareness of connection between stray and owned* (‘stray’ might be owned roaming, but creating puppies)
  - Public awareness and attitudes toward principles of responsible pet ownership (vaccination, sterilisation, controlled reproduction)
  - What are people ’s concerns? Rabies? Bites? Barking?
  - *Do people want dogs on the street? vs. Do people want dogs killed?*
  - *Will people tolerate community dogs if safe/healthy, not aggressive and sterilised?*
- Human Behaviour (What people do)
  - Why do people own dogs?
  - How do they treat their owned dogs? Training?
  - Do people let their dogs roam? Abandon?
  - What do they do with unwanted puppies when their dog gets pregnant?
  - What are most common issues that people cannot cope with (causing abandonment)? Disease, behaviour, money, etc.

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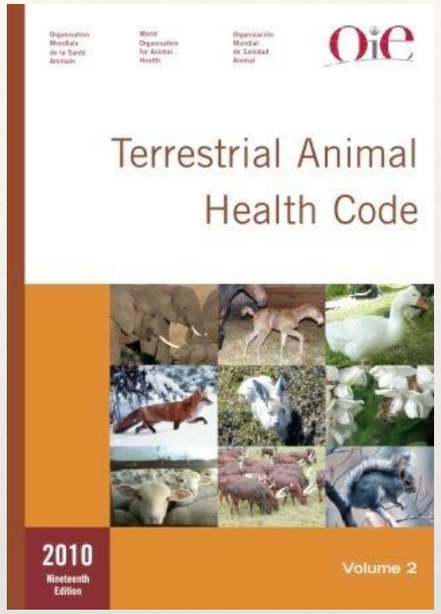
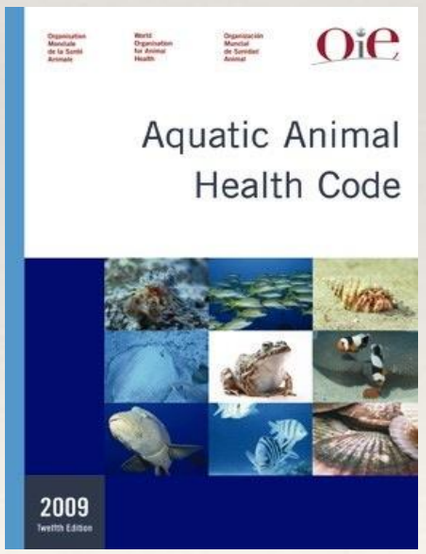
OIE stray dog control guiding principles

- Critical importance of promotion of **responsible dog ownership**
- Recognizes that **dog ecology** is closely **linked to human behaviour**
- Promotes humane stray control practices
- **Need to change human behaviour** to be successful in stray dog population management programs





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Factors influencing dog population size

Human attitudes and behavior

Reproductive capacity of the population

Access to resources

Community resources and stakeholder action

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Raising public awareness

WHY?

- Dog ecology is linked with human activities
- Promotion of RPO can significantly reduce the numbers of stray dogs and incidence of zoonotic disease
- Successful DPM intervention has to be accompanied by a change in human behaviour

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Promoting responsible ownership/citizenship

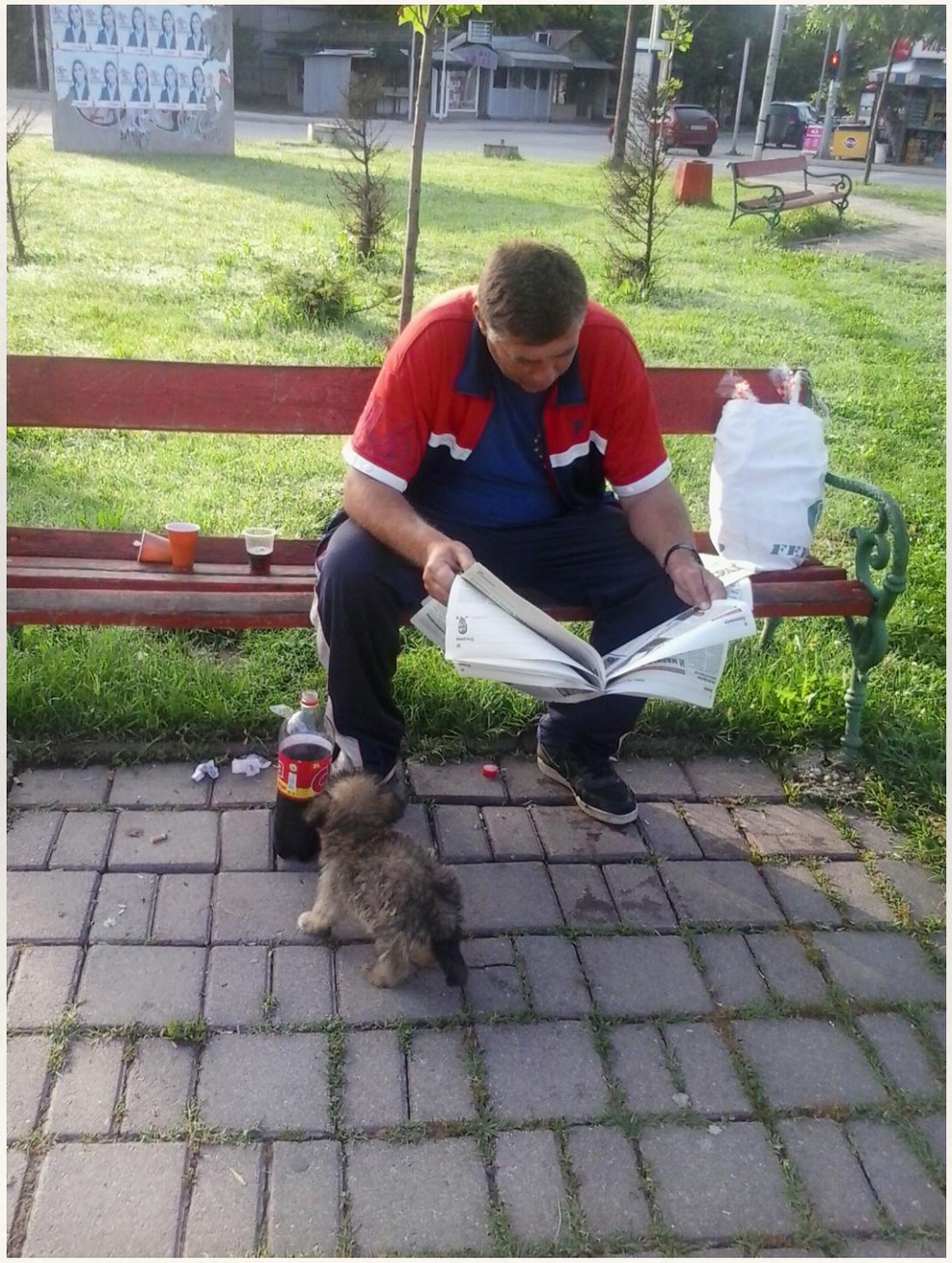
-The major challenge for a successful DPM programme.

-RPO means a different ‘thing’ in different communities.

-The health and welfare of domestic dogs may be improved through the promotion of responsible human ownership.

-All stakeholders have a role to play and should deliver the same message.

Factors motivating people to control dog populations



-Zoonotic disease

-Current roaming dog population

-Poor welfare of the roaming population

-Risk to the public

-Nuisance

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Community engagement

- Community engagement is critical when planning and designing an intervention. Interventions must be community owned.
- Without public support even the well resourced and planned programmes can't succeed.
- Any intervention has to seek engagement from the wider community.

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Creating a multi stakeholder concept

-Governmental bodies

-Veterinary community

-Local and municipal communities

-Dog owners and potential dog owners

-NGO community

-Academic community

-Educators

-Local media

-Local leaders

-International bodies

-Private sector

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Developing a comprehensive DPM programme

Art. 2 Dog population control programme objectives

- Improve dog **health and welfare**
- **Reduce the numbers of stray dogs** to an acceptable level
- **Reduce the risk** of **zoonosis** and parasitic infections
- Protect the **environment**
- Prevent **illegal trade** and **trafficking**

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Identifying the source of the problem and monitoring the stray dog population

Possible impacts:

- Improve dog welfare
- Improve care provided to dogs
- Reduce dog population density/population turnover
- Reduce risks to public health
- Improve public perception of dogs
- Improve rehoming centre performance
- Reduce negative impact on wildlife
- Reduce negative impact of dogs on livestock

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Setting clear objectives (an example)

Interventions are a combined set of activities with specific changes or impacts in mind

Catch, neuter and release of roaming dogs in a Balkan city

Impacts are the changes we hope to contribute towards through our interventions

Reduce dog density

Improve the welfare of roaming dogs

Indicators are measurable signs of impacts (also known as **metrics**); they are the things we would see or hear if our desired impact was occurring

Number of dogs seen on a set of routes along public roads

The % of roaming dogs with emaciated body condition

Methods of measurement are the methods we use to measure our indicators

Observation of the number and body condition score of all roaming dogs observed on a 6 monthly 'street' survey

Effort is the time and resources put into implementing the intervention

The number of dogs caught, neutered and released and the financial costs per dog plus capital costs of intervention infrastructure

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Designing an intervention

- The cycle begins with an intervention concept; the desire to reduce stray dog population.

- Before an intervention is launched it is necessary to measure the baseline of indicators selected to reflect the impact.

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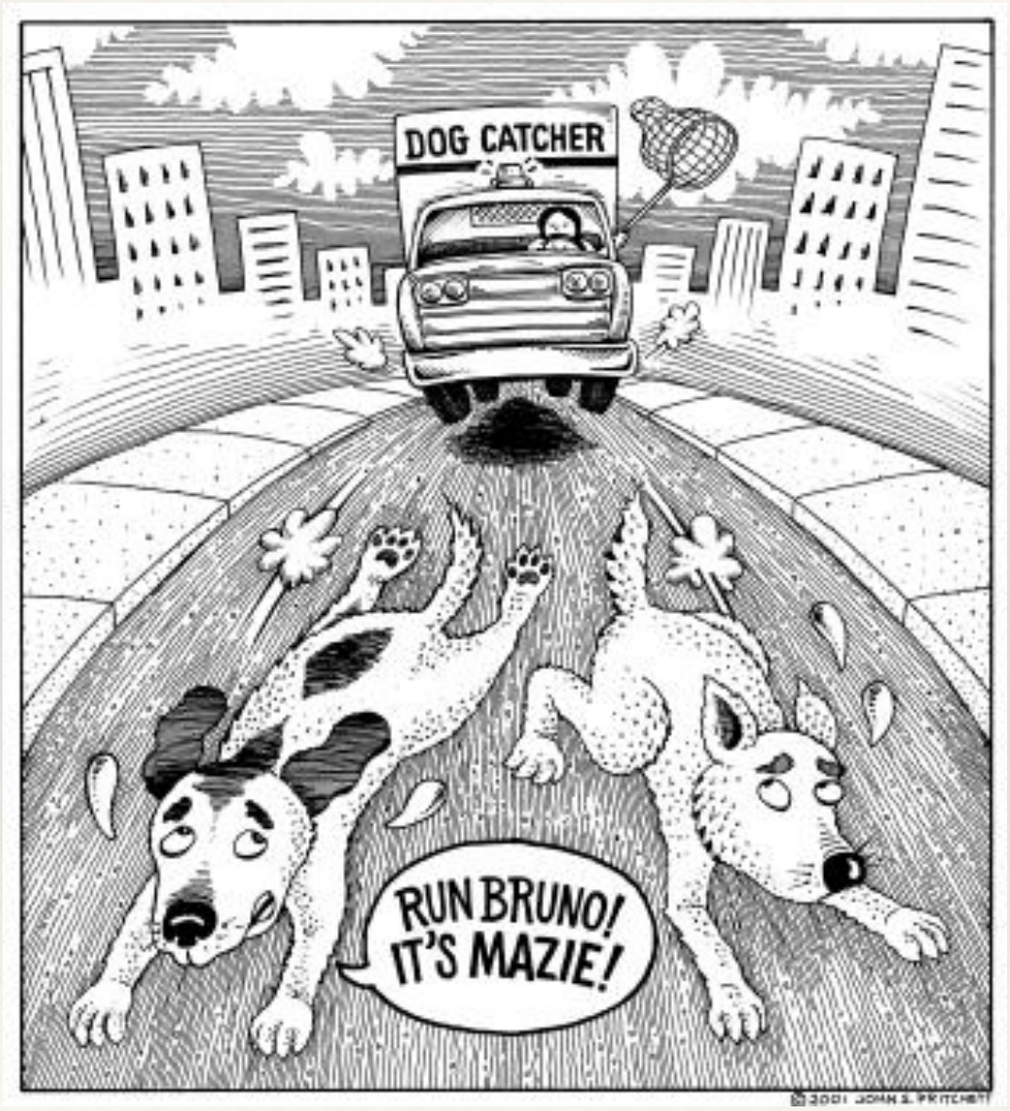
DESIGNING AN INTERVENTION



Sustainability

Aims, objective and activities

Defining policy and setting standards

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COMPREHENSIVE PROGRAMME

Education

Legislation

Veterinary care provisions

Registration, identification

Sterilisation

Holding facilities/

rehoming centres

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MONITORING AND EVALUATION

To improve performance, highlight problems

To be accountable to stakeholders, and demonstrate success

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Developing a comprehensive programme

- If you don’t know where you are going, how will you know when you get there?
- What impacts is the intervention striving to achieve?
- Monitoring and evaluation

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Developing a comprehensive programme

- Are we making a difference?
- What problem are we trying to solve?
- Has the intervention brought desirable results?

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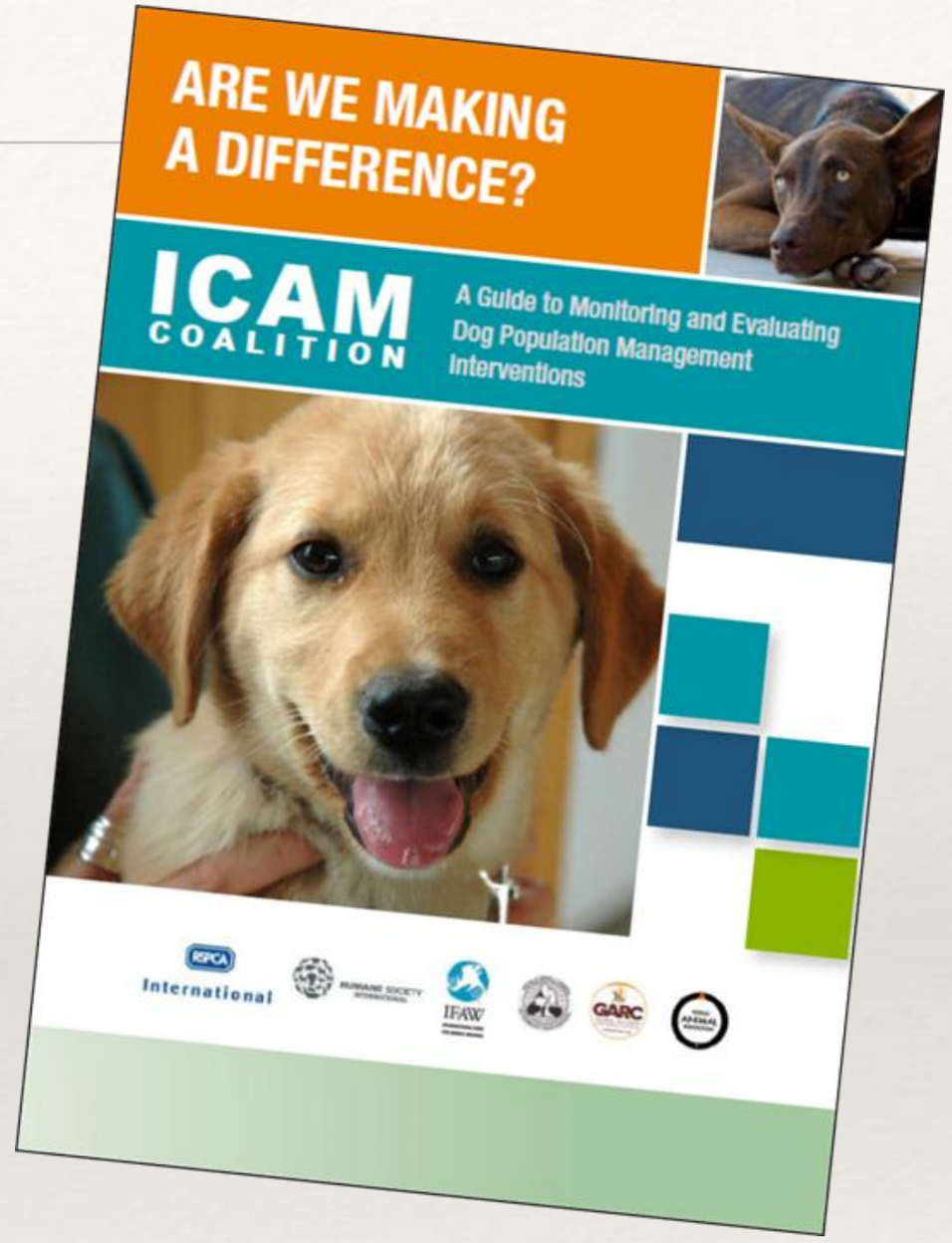
Collated innovation in M&E from international field and combined with academic expertise to develop guidance

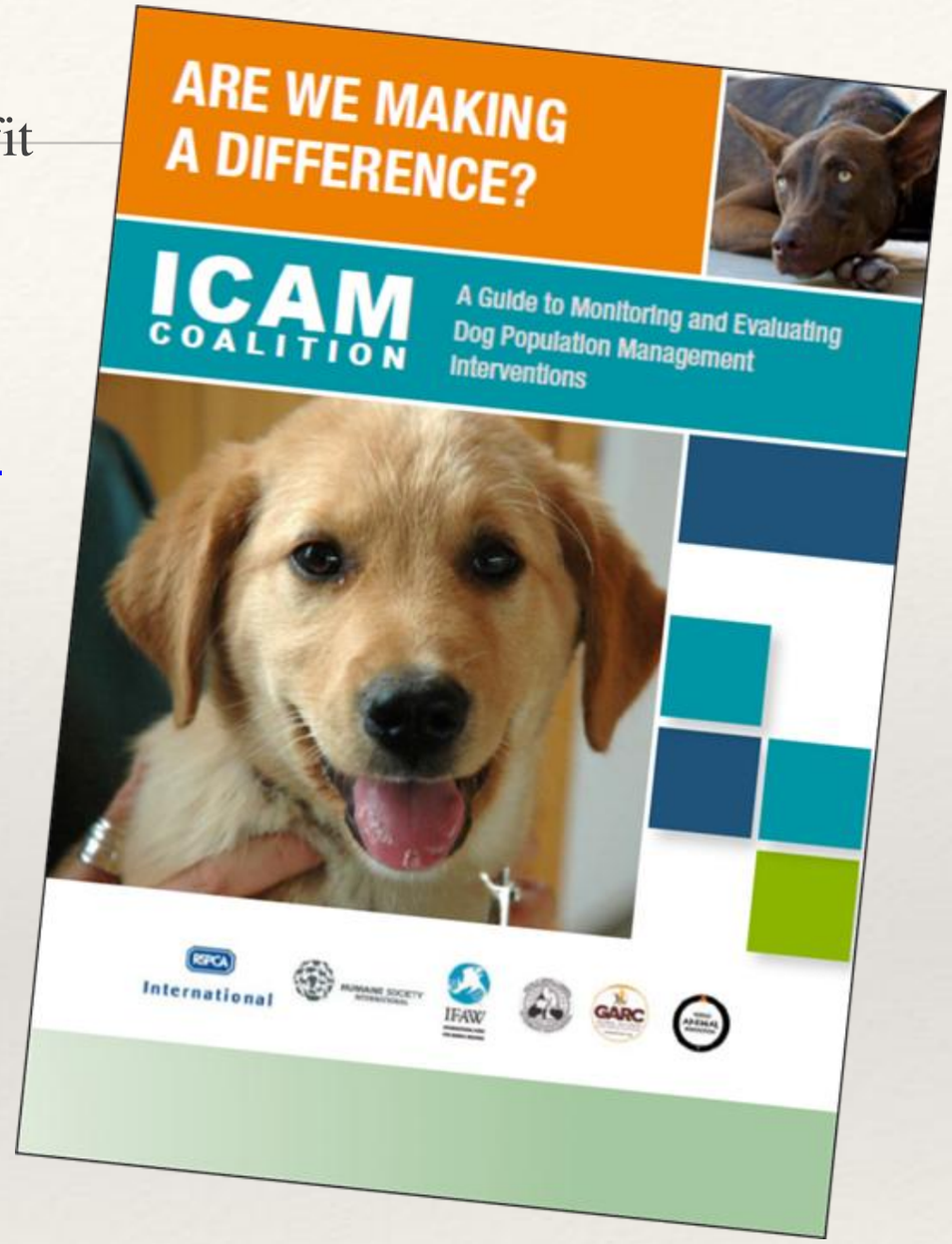
Provides detailed description of meaningful indicators and accompanying cost-effective methods of measurement, falling under 8 potential impacts



Online impact assessment tool creates tailored guidance to fit your intervention

Full guidance and online tool are accessible at www.icam-coalition.org

‘Best yet’ practice, not a gold standard. We encourage innovation and feedback to enable progress in building an evidence-based field of humane dog control - info@icam-coalition.org



8 Impacts

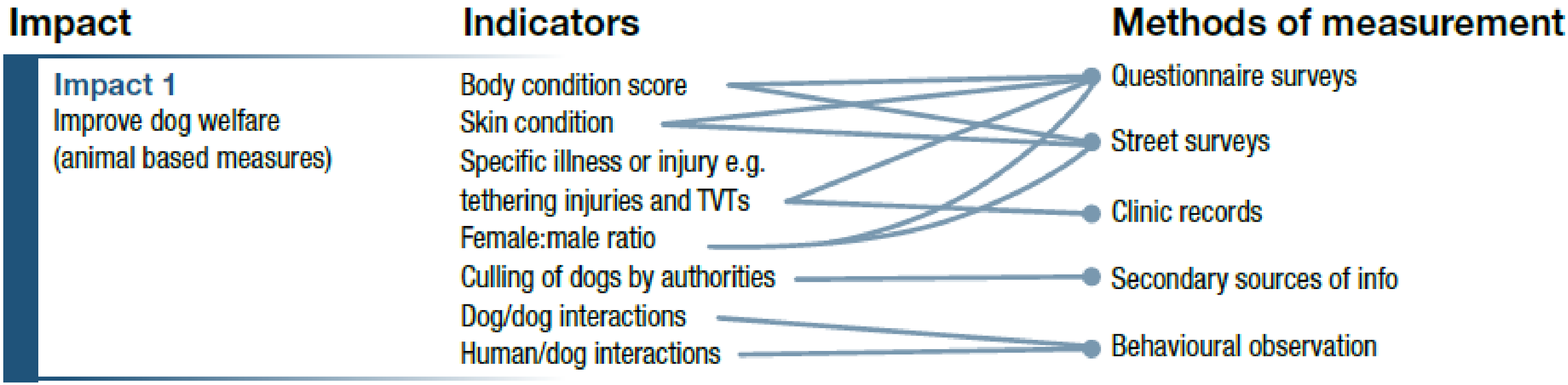
1. Improve dog welfare
2. Improve care provided to dogs
3. Reduce dog density/Stabilise turnover
4. Reduce risks to public health
5. Improve public perception
6. Improve rehoming centre performance
7. Reduce negative impacts of dogs on wildlife
8. Reduce negative impacts of dogs on livestock

Indicators

Each impact has a list of indicators

Recommended

Suggested

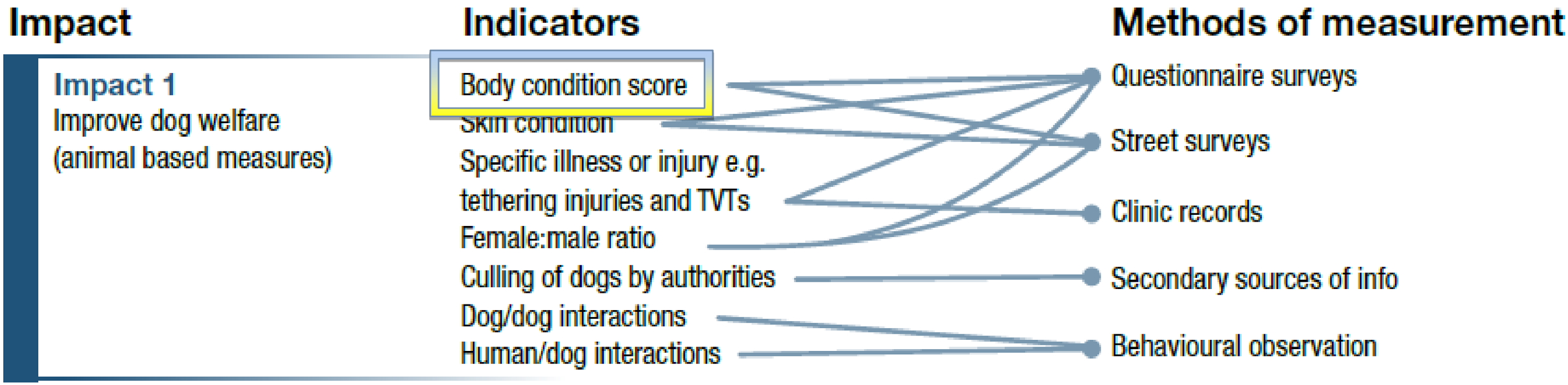


Indicators

Each impact has a list of indicators

Recommended

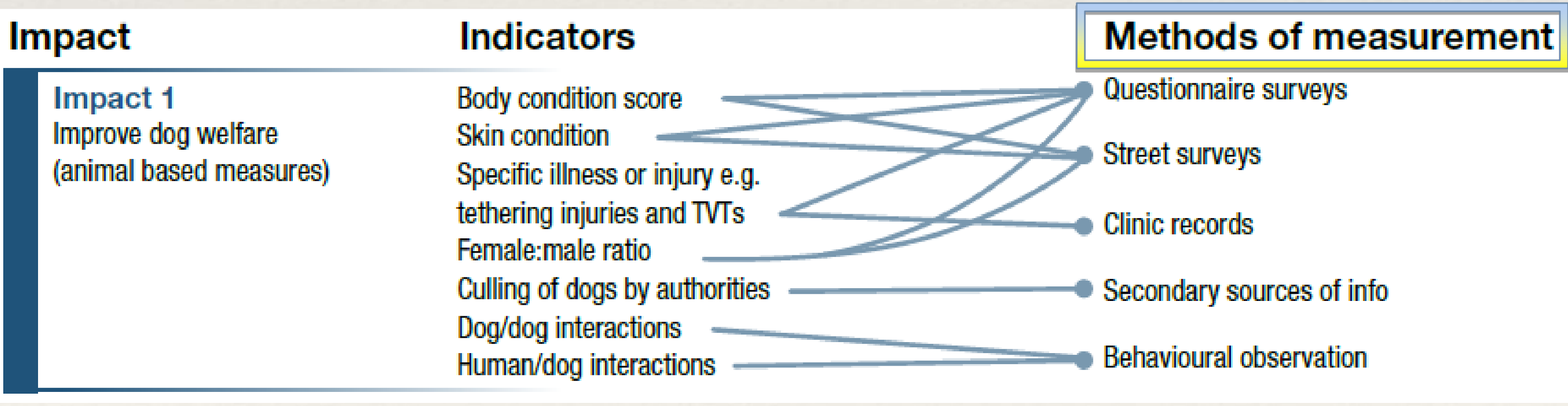
Suggested



e.g. Body condition score – *recommended*

Method of measurement

Each indicator is accompanied by at least one suggested method of measurement



e.g. Street surveys

7 Methods of Measurement

1. Questionnaire surveys
2. Participatory research methods
3. Street surveys
4. Secondary sources of information
5. Clinic records
6. Behavioural observation
7. Street surveys and questionnaires for vaccination coverage

You choose...

Impacts

Indicators

Method of measurement

Implementation, monitoring and evaluation

- Community will expect demonstrable evidence whether an intervention has been effective.
- People will know whether the situation is improving.
- It is important to involve the community in M&E and discuss the positives and negatives openly and transparently.
- To change public perception od dogs it is critical that all stakeholders work together and communicate openly.
- If the programme ensures a community ‘buy- in’ and the implementation is transparent this is the most certain way of influencing public perception.

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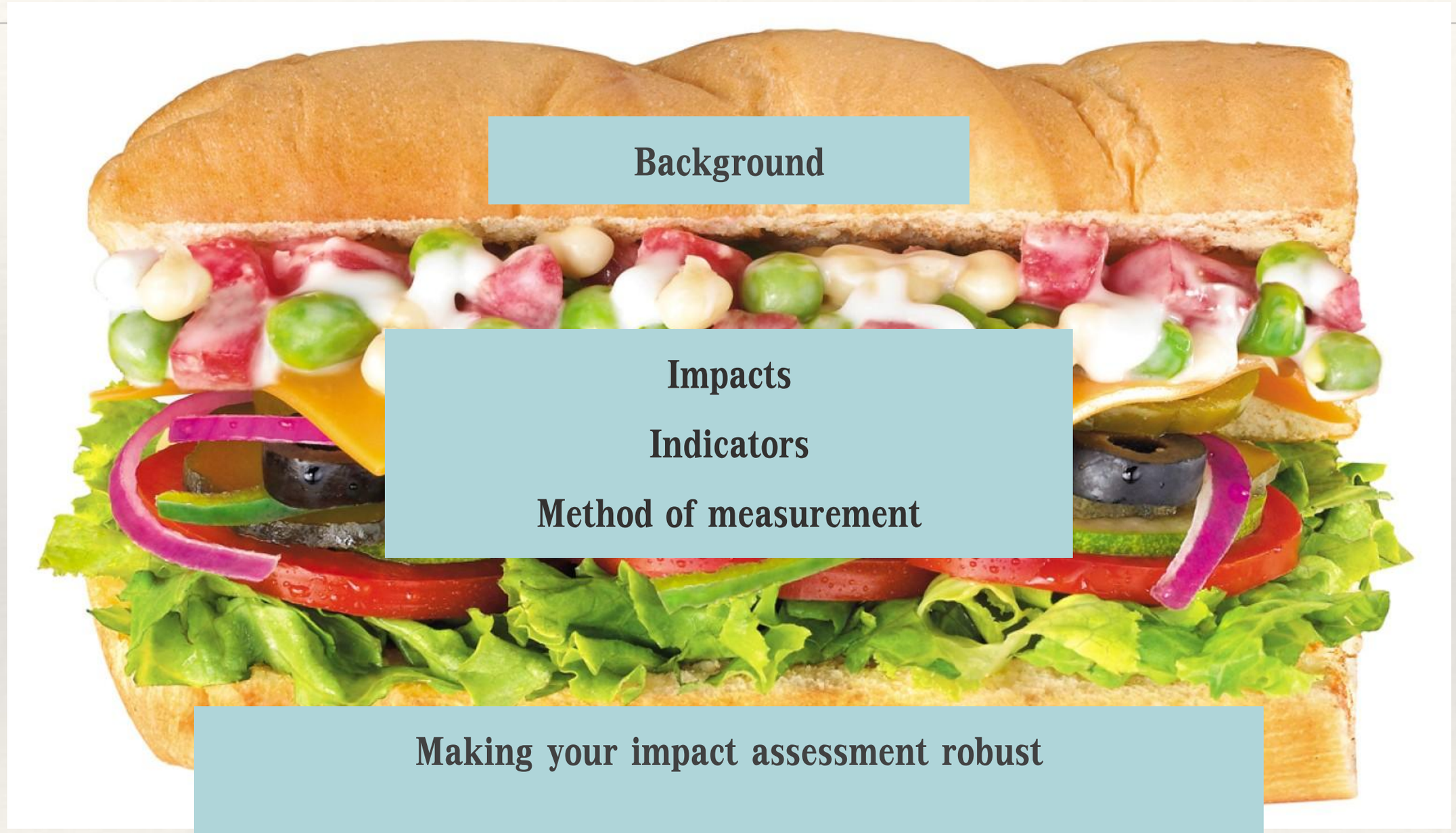
You choose...


Background
Impacts
Indicators
Method of measurement
Making your impact assessment robust

Accessing the guidance

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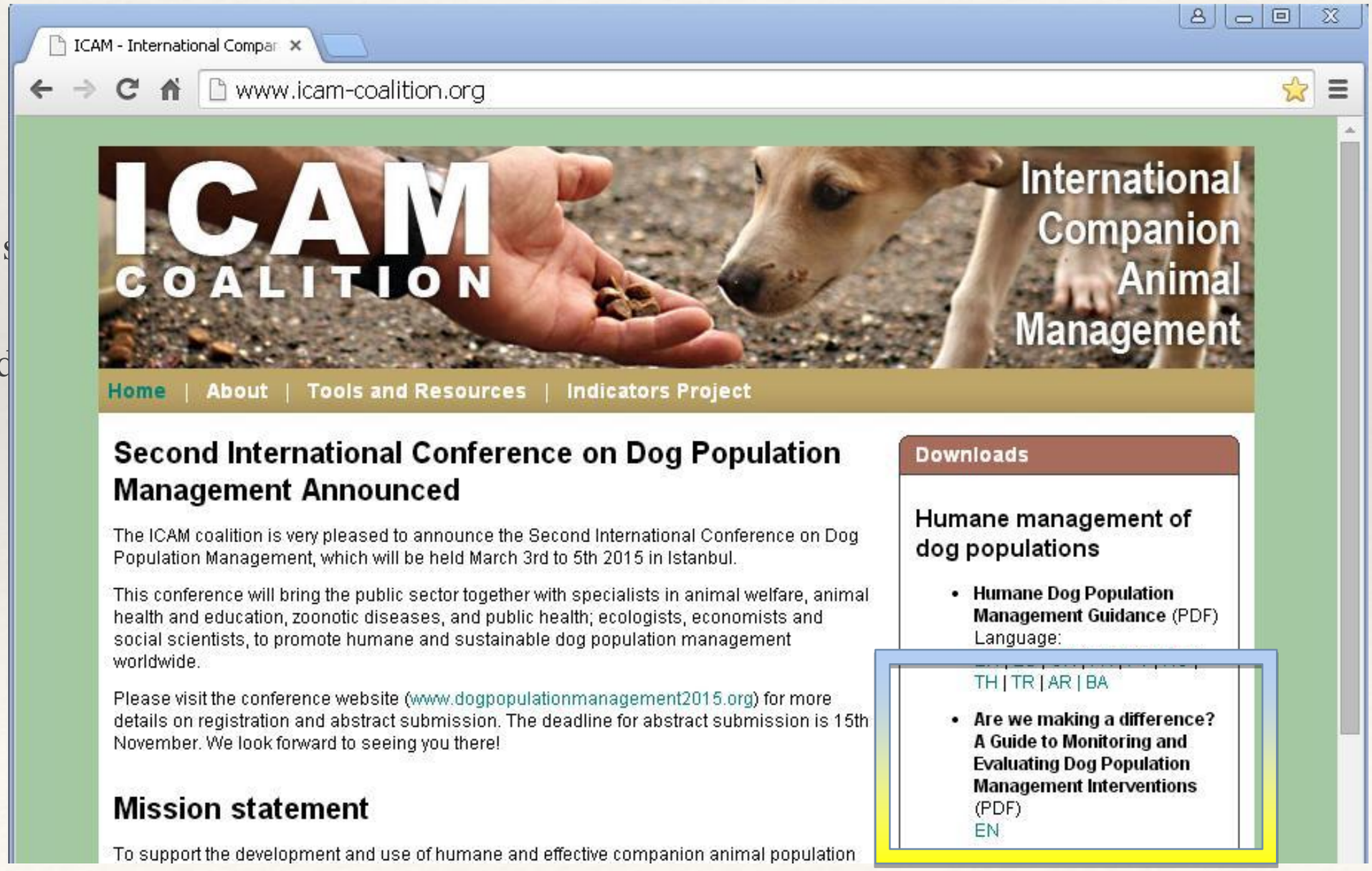

In summary...

✓ Community problem

✓ Societal concern

✓ Dog and human ecology interconnected

✓ Need to effect the human behavior

✓ Need a full stakeholder engagement

-stakeholder committees

✓ Tools to measure public perception

✓ Communications strategy

✓ People need to understand how they can affect stray dog population dynamics

✓ Targeting owners and potential owners

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Remaining challenges

✓ Public attitudes / perception – societal dimension

✓ Political will – right motivation for DPM vs. quick fixes

✓ Improve communication and coordination between the stakeholders.

✓ Improve enforcement of the existing laws

✓ Set clear competencies for DPM

✓ Develop infrastructure and resources

✓ Education and training at all levels

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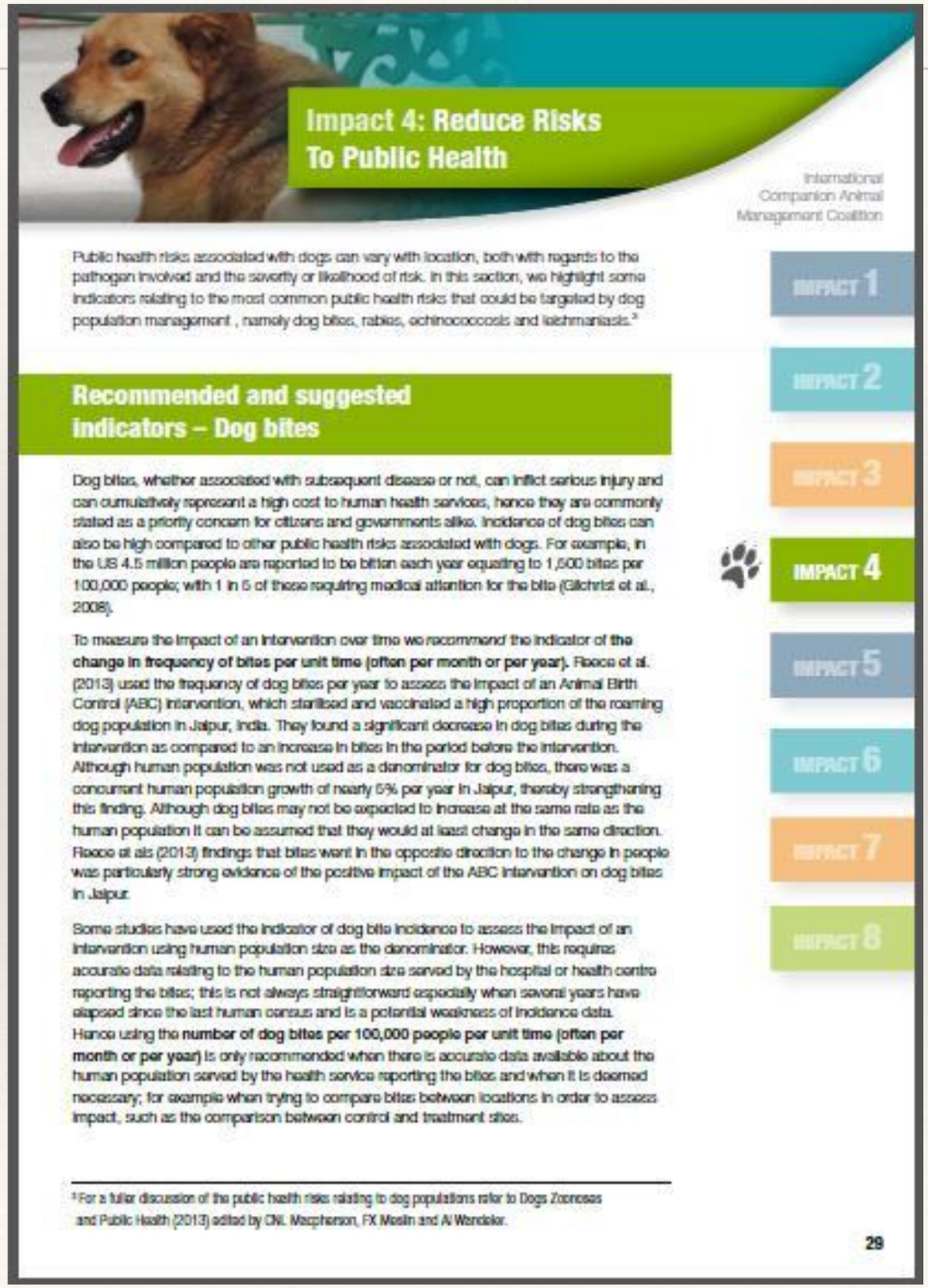
Thank you!

Navigating the guidance



Impact 4: Reduce Risks To Public Health

International Companion Animal Management Coalition

Public health risks associated with dogs can vary with location, both with regards to the pathogen involved and the severity or likelihood of risk. In this section, we highlight some indicators relating to the most common public health risks that could be targeted by dog population management , namely dog bites, rabies, echinococcosis and leishmaniasis.[3]

Recommended and suggested indicators – Dog bites

Dog bites, whether associated with subsequent disease or not, can inflict serious injury and can cumulatively represent a high cost to human health services, hence they are commonly stated as a priority concern for citizens and governments alike. Incidence of dog bites can also be high compared to other public health risks associated with dogs. For example, in the US 4.5 million people are reported to be bitten each year equating to 1,500 bites per 100,000 people; with 1 in 5 of these requiring medical attention for the bite (Gilchrist et al., 2008).

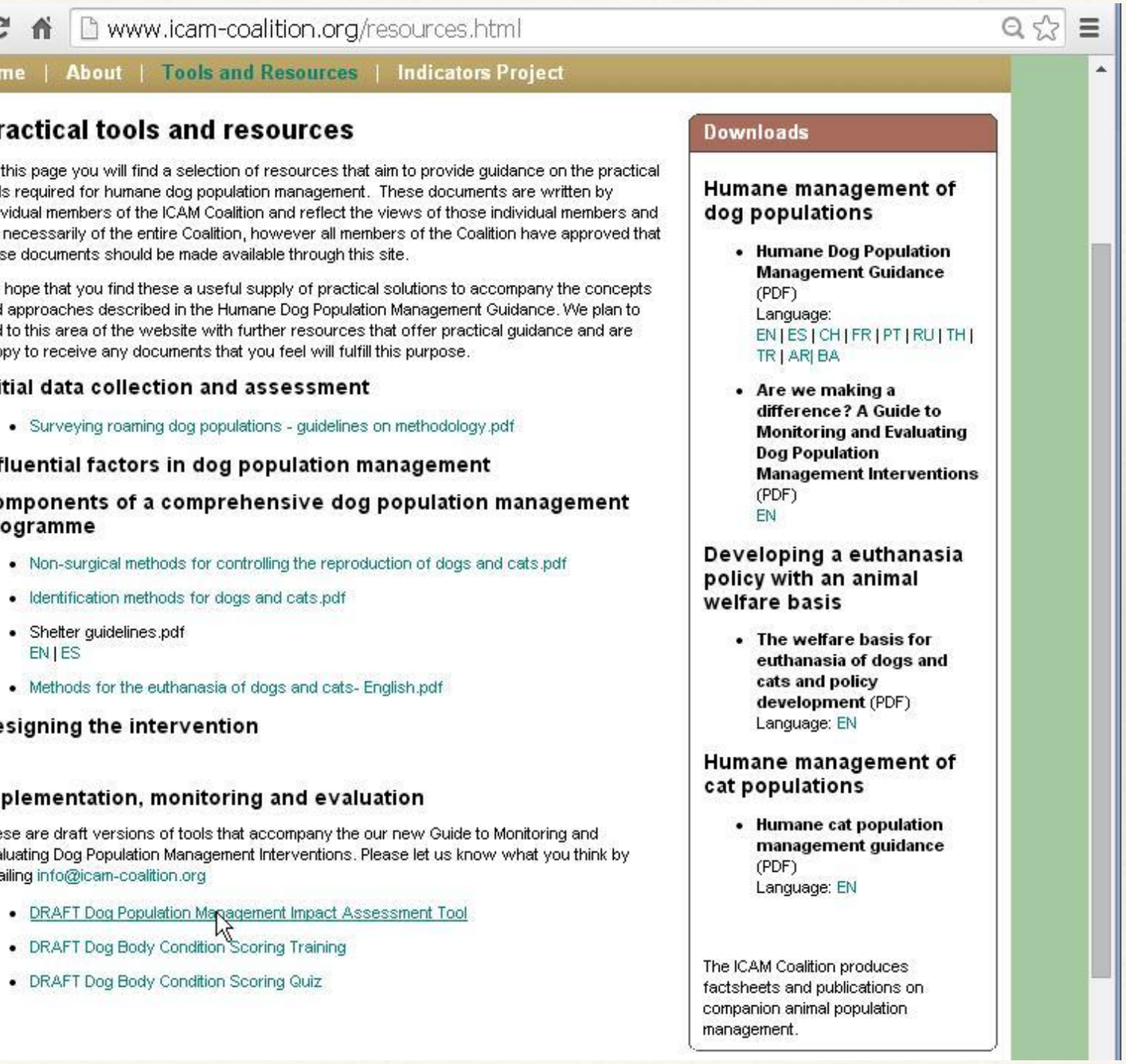
To measure the impact of an intervention over time we *recommend* the indicator of **the change in frequency of bites per unit time (often per month or per year).** Reece et al. (2013) used the frequency of dog bites per year to assess the impact of an Animal Birth Control (ABC) intervention, which sterilised and vaccinated a high proportion of the roaming dog population in Jaipur, India. They found a significant decrease in dog bites during the intervention as compared to an increase in bites in the period before the intervention. Although human population was not used as a denominator for dog bites, there was a concurrent human population growth of nearly 5% per year in Jaipur, thereby strengthening this finding. Although dog bites may not be expected to increase at the same rate as the human population it can be assumed that they would at least change in the same direction. Reece et als (2013) findings that bites went in the opposite direction to the change in people was particularly strong evidence of the positive impact of the ABC intervention on dog bites in Jaipur.

Some studies have used the indicator of dog bite incidence to assess the impact of an intervention using human population size as the denominator. However, this requires accurate data relating to the human population size served by the hospital or health centre reporting the bites; this is not always straightforward especially when several years have elapsed since the last human census and is a potential weakness of incidence data. Hence using the **number of dog bites per 100,000 people per unit time (often per month or per year)** is only recommended when there is accurate data available about the human population served by the health service reporting the bites and when it is deemed necessary; for example when trying to compare bites between locations in order to assess impact, such as the comparison between control and treatment sites.

[3] For a fuller discussion of the public health risks relating to dog populations refer to Dogs Zoonoses and Public Health (2013) edited by CNL Macpherson, FX Meslin and AI Wandeler.

IMPACT 1
IMPACT 2
IMPACT 3
IMPACT 4
IMPACT 5
IMPACT 6
IMPACT 7
IMPACT 8

Navigating the guidance



Use our online impact assessment tool

Sign up as a user

Choose your impacts

Series of questions

→ creates guidance.pdf incl indicators and MoM tailored to your intervention

Dog Population Management Impact Assessment Tool

ICAM
INTERNATIONAL COMPANION ANIMAL MANAGEMENT COALITION

Username

ellyhiby

Password

••••••

Log in

Register

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COALITION

Dog Population Management Impact Assessment Tool

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Logout

To start a new assessment, click the "Begin evaluation" button.

Begin evaluation

Essential Guidance

The following documents are essential for every project.

Background
Making Your Impact Assessment Robust

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Dog Population Management Impact Assessment Tool

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Choose the impact that your intervention aims to achieve.

Impact 1: Improve dog welfare

Impact 2: Improve care provided to dogs

Impact 3: Reduce dog density/Stabilise turnover

Impact 4: Reduce risks to public health

Impact 5: Improve public perception

Impact 6: Improve rehoming centre performance

Impact 7: Reduce negative impacts of dogs on wildlife

Impact 8: Reduce negative impacts of dogs on livestock

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Impact 1

Do you see skinny dogs in your population?

Yes No

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Impact 1

indicator

Body condition score

Body condition scores are awarded on the basis of body fat coverage and not on coat health or injuries. Scores can range from emaciated to obese (1 – 5); it reflects the quality and quantity of food resources and is affected by concurrent underlying conditions such as disease and parasite load. Scores can be judged through observation alone without the need for physical examination.

Continue

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Dog Population Management Online Tool

International Companion Animal Management Coalition

Impact 1

Do you see the dogs you are targeting roaming on the street?

Yes No

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Impact 1

Summary

Based on the answers you gave, we think you want to measure the following indicators.
Please note: Those highlighted in green are the ones we think will work for you; those that are greyed out don't seem to be suitable based on your answers.

Body condition score	Skin condition	Specific disease or injury
Canine transmissible venereal tumours (TVTs)	Female: male ratios	Culling of dogs by authorities
Dog-dog interactions	Human-dog interactions	

And that to measure these you will need to use the following methods of measurement:
Please note: Those highlighted in orange are the ones we think will work for you; those that are greyed out don't seem to be suitable based on your answers.

Household questionnaires	Street surveys	Clinic records
Secondary sources of information	Behavioural observation method	Street surveys and questionnaires for measuring vaccination coverage
Sales figures from local vendours	Participatory research methods	Data submitted by rehoming centre
Collaboration between wildlife and dog stakeholders for data collection		

View Summary of Recommendations

Return to Dashboard

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Impact 1: Improve Dog Welfare (Animal Based Indicators)

International Companion Animal Management Coalition

Online Tool Summary PDF

Indicators

- 1 Body condition score
- 4 Canine transmissible venereal tumours (TVTs)
- 8 Human-dog interactions

Methods of Measurement

- 1 Household questionnaires
- 2 Street surveys
- 3 Clinic records
- 5 Behavioural observation method

IMPACT 1

IMPACT 2

IMPACT 3

IMPACT 4

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To start a new assessment, click the "Begin evaluation" button.

Begin evaluation

Essential Guidance

The following documents are essential for every project.

Background
Making Your Impact Assessment Robust

Your tailored Impact guidance

Click on the result to access the summary of recommendations for your project.

Date	Results
2/25/2015	Impact 1 Results
2/25/2015	Impact 2 Results
2/25/2015	Impact 6 Results

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