

Conflict, Controversy, & Killing



Some social challenges of grey squirrel management

The social science of invasive species

People produce invasions



People are affected by invasions



People respond to invasions



People disagree about responding to invasions



Challenge 1: Conflict



Conflict in invasive species management

Efficacy

- Will it work?

Efficiency (Cost-benefit ratio)

- Is it justifiable?

Equity (Cost-benefit distribution)

- Is it fair?

Ethics

- Is it good?

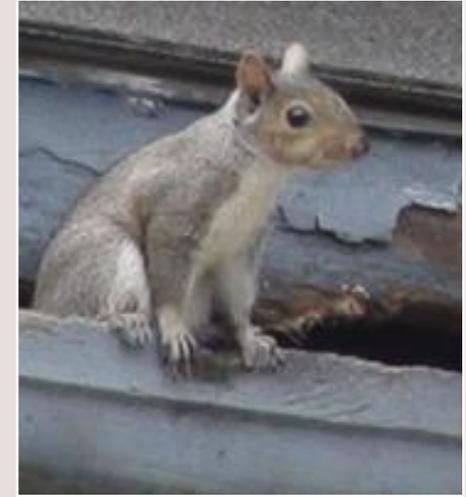


Challenge 2: Killing



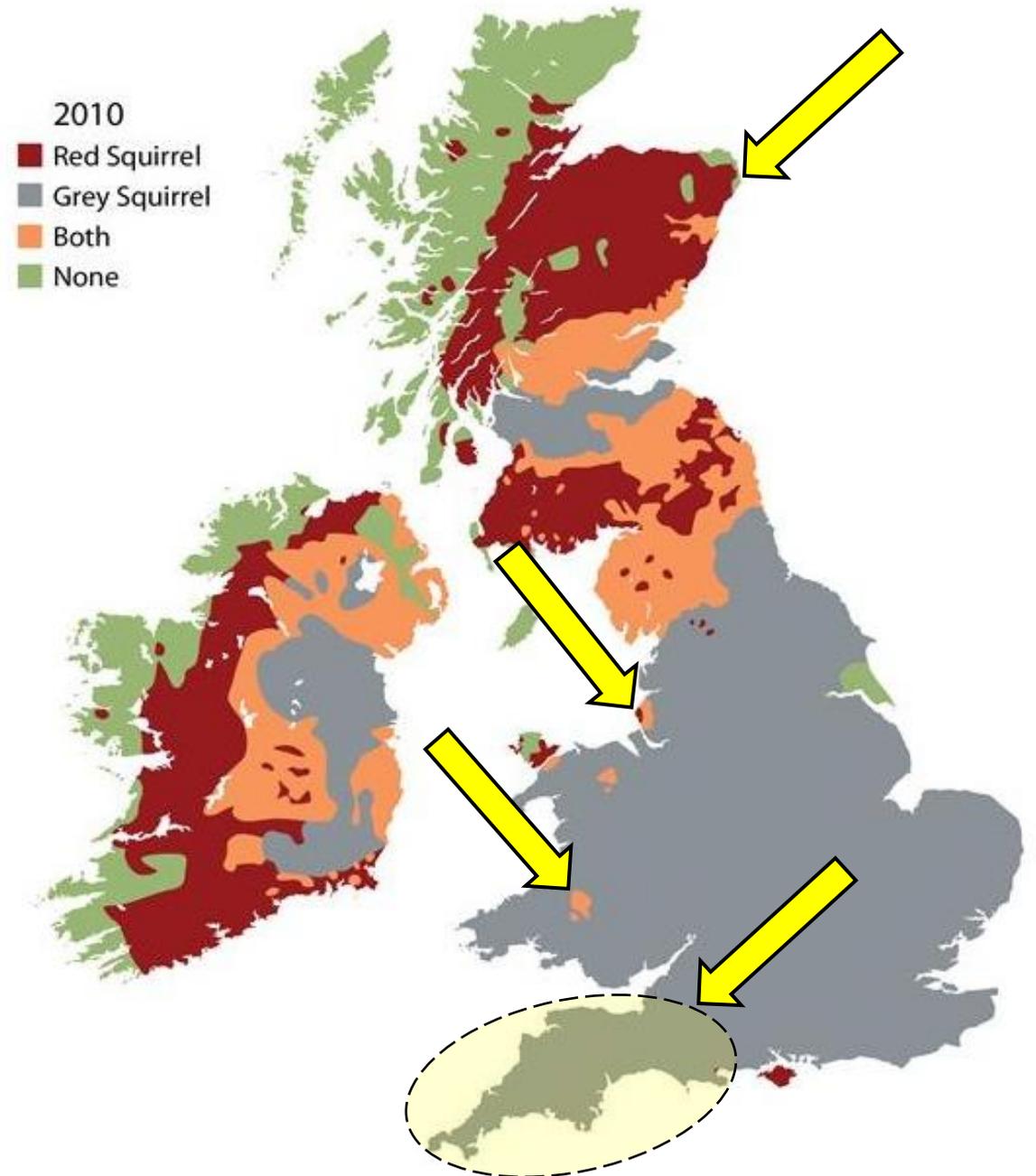
'Arenas' of Grey Squirrel Control

- Red squirrel conservation
- Forestry and woodland management
- *Ad hoc* and routine pest control
- Recreational shooting



Research Methods

- 4 case regions (SW England; NW England; Scotland; Wales)
- 50 participants (30m, 20f)
 - Volunteers
 - Wildlife management professionals
 - Forestry professionals
 - Woodland owners
- Semi-structured interviews, 'go-along' interviews and participant observation





Modes of Killing

There's more than one way to kill a squirrel

Associated with (but not restricted to) 'arenas' of control

Not static or mutually exclusive



Reparative / Sacrificial Killing

Arena:	Red Squirrel conservation
Attitude to lethal control:	Discomfort: a 'nasty necessity'
Preferred method:	Trap and 'dispatch'
Grey squirrels as...	Innocent sacrifices
Preferred future method:	Sustainable control e.g. biocontrol, vaccine, immunocontraception

“In the interests of saving the [red] squirrels, it’s a necessary evil... It’s all our fault, and we need to do something about it!”

- *RSC volunteer*

“I don’t like doing it, I’d never killed anything in my life... but then, the reds have to be saved, don’t they?
I really don’t have much choice.

- *RSC volunteer*



Stewardship Killing

Arena:	Woodland protection
Attitude to lethal control:	Pragmatism: Job needs doing
Preferred method:	Kill-traps; poison
Grey squirrels as...	Culpable pests
Preferred future method:	More efficient control e.g. GoodNature™ trap

“We felt the need to exercise some degree of control, just to reduce the population to the point where the damage [squirrels] do is acceptable, rather than unacceptable...”

- Forestry professional

[Shrugs]

“It’s the job, isn’t it?”

- Wildlife management professional



Categorical Killing

Killed based on classification as:

**Vermin (“tree-rats”)
or
“invasives”**

Not because of what they do but because of what they are

Arena:	Anywhere
Attitude to lethal control:	Approval
Preferred method:	Variable: most are acceptable
Grey squirrels as...	Inherently undesirable
Preferred future method:	Coordinated, landscape scale control

“public enemy number one...

There are people who think that grey squirrels are sweet! If they were referred to as tree-rats - which they are - that might elicit a different response.”

- *Woodland owner*

”The more control the better”

- *Wildlife management professional*

Challenge 3: Controversy



Mode of Killing:	Reparative / Sacrificial	Stewardship	Categorical	<i>Recreational</i>
Arena:	Red Squirrel conservation	Woodland protection	Anywhere	<i>Game shooting</i>
Attitude to lethal control	Discomfort	Pragmatism	Approval	<i>Enthusiasm</i>
Ultimate aim	Red squirrel recovery	Healthy, productive woodland	Grey squirrel suppression	<i>Rewarding experiences</i>
Preferred method	Trap and release	Proactive control	Various, but all acceptable	<i>Shooting</i>
Current strategy	Stronghold defence; local elimination	Reactive control; population reduction	Proactive or routine control; publicity	<i>Ad-hoc; 'squirrel days'</i>
Preferred future strategy	Sustainable control, e.g. biocontrol (pine martens), vaccines	More efficient control, e.g. GoodNature™ trap	Coordinated, landscape scale control, public support	<i>Greater opportunities & access</i>
Grey squirrels as	Innocent sacrifices	Culpable pests	Inherently undesirable	<i>Fair game</i>

And this is before we include all the people who disagree with all these forms of killing...

Key Findings for Conservation Organisations

Lethal control
problematic when:

- **Inefficacious** (not working)
- **Inefficient** (high-cost, low-benefit)
- **Inequitable** (e.g. private gain, public loss)
- **Unethical** (inhumane)

More acceptable (and
more positive
engagement) when:

- **Redemptive**; serving a 'public good'
- **Targeted**, monitored, with clear aims (not retributive or ad-hoc)
- **Professional** (or professionally coordinated)
- **Humane**
- **Honest** communications





Thank you!

The paper:

Crowley, S. L., Hinchliffe, S. & McDonald, R. A. (2018). Killing squirrels: Exploring motivations and practices of lethal wildlife management. *Environment and Planning E: Nature and Space*, 1(1-2), 120-143.



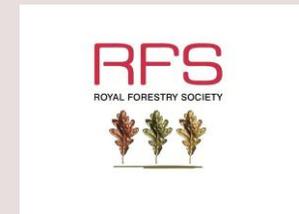
Professor Robbie McDonald
Environment & Sustainability Institute



Professor Steve Hinchliffe
Geography



Confor
Promoting forestry and wood



***Thanks to all our research participants for their
time and contributions***