

What's wrong with culling?

There is a current trend, even within green organizations to consider that culling is a practice that is necessary to control animal populations.

There is a very simplistic and ignorant notion, that if any population becomes unwieldy or causes some sort of intrusion or impact then it should be decimated.

Quite apart from this notion's lack of green credibility, it actually lacks understanding of the wider implications of carrying out a cull and the impacts upon other species.

There are a few arguments in favour of culls which upon the surface appear valid but upon closer inspection fall short of a viable practice of controlling animal population.

ETHICS

Without recourse to any other information one is immediately struck by the ethical considerations. Merely blasting animals into an early grave is shortsighted, and has the same kind of aftertaste that comes with knowledge of the victims of the holocaust. Because animals are considered "lesser beings" it is considered viable for us to kill them, especially when they are also foodstuff.

When Hitler willfully killed human beings, there was world outcry. His arbitrary choice of Jews, the mentally feeble and anyone who happened not to be his super German blue eyed blondes were exterminated.

His treatment of his victims was unethical. Many protest that animal life is not as valuable as human life - but that is arrogant self important humans talking.

It is just as unethical to carry out a cull. If we for a moment consider that we are the Canada goose, grey squirrel or badger then we might take a different view.

If an alien race came here with some "Independence Day" idea of a human cull, we would be outraged and yet the one organism on this planet that stands to damage all others and is in dire need of a cull is human beings.

Yet, who would be the first one to go to DEFRA and demand that there are too many human beings impacting on all other creatures and some of them should be culled?

No? Why?

Because human beings are more important than other creatures? Not so.

In recent times, it has become evident that we are somewhat dependent upon bees.

More complex still, the whole world is a web of flora and fauna, each species impacting upon the next one. Simple culls cause a domino chain effect into other species and other webs of creatures.

One cannot compare a cull to the demise of the Dodo. The dodo had no idea that a rapacious predator had just landed. It had never seen a human being. Consequently it was wiped out, much as other human civilisations have by other humans. Make no mistake, humans have as much a hand in being a problem as other creatures might be. In that case *mankind* was the invasive species.

INVASIVE SPECIES

Another of the arguments put forward to cull is that animals are foreign and do not belong here. Again this is a naive and shortsighted view considering that spiders are

blown all over the world on webs, seeds are spread by birds and their own flight systems, and even the notion of what is considered invasive is marked by a line of historical memory. Some of what are now considered indigenous species are actually settled foreign ones.

[See <http://medlockandtame.org.uk/ispecies.html>]

It is also the case (and it was published in New Scientist magazine) that many invasive species, whilst spreading quickly, pose little or no threat to existing species. They do what Darwin suggested they do; settle into a niche that is not held by another organism.

Squirrel cull? Frankly it's nuts

■ Squirrel slaughterer Paul Parker (Metro, Fri) may be making his fortune selling dead squirrels to gimmicky restaurants and butchers but his claim that killing grey squirrels will save red squirrels is a fantasy. Massive government-sponsored culling of squirrels in the 1950s had

to be abandoned because it resulted in increases in both numbers and range of grey squirrels. In modern Britain grey squirrels – as well as being loved and admired by millions of people – are more adaptable and hardy than the reds. It's called survival of the fittest.

John Bryant, Kent

► **Hoorah for Prince Charles for wanting to eliminate the grey squirrel. These pests destroy our beautiful trees and woodlands. We should shoot the pesky little blighters.**

Steve, Rotherham

Note the result that John Bryant quotes - killing greys INCREASED their numbers.

This begs the question why culls get started at all. A lot of it seems to be sheer dislike or demonisation or lack of understanding of population dynamics. Culling a species can actually have the opposite effect that one wishes, resulting in increased populations (this has been noted in the grey squirrel population).

The mathematics of this, championed by Sir Robert May, is modern and counter intuitive. The idea that simply killing a portion of a species results in less of them is severely mathematically naive.

Another point about this is that indiscriminate culling can kill off strong individuals and leave the rest weak, or leave families without food providers. Which means many more die as a result of one death.

If culling had any merit at all it should target the weak or the disease carrying. But even the notion of disease carrying is not without pitfalls. Badgers are subject to culls because of disease carried to livestock, but even DEFRA has admitted cows give badgers the same disease, and yet cows are not culled because they are a cash crop.

In our own society, we do not kill the diseased, we heal them. This is what OUGHT to happen to animals. It costs thousands of pounds to carry out a cull, and yet if the individuals that maybe diseased were inoculated, perhaps the cost would be worth it in the long run as the disease would be stopped from spreading - the fact is it is being assumed that a dead badger is cheaper than an inoculated one.

If this was how the NHS functioned we'd be raging.

If we do not see why we should apply human values to animals, then we might consider that cetaceans are being considered for legal rights; that Peter Singer has already pointed out the rationale behind why animals should have rights; mathematician Roger Penrose in his study of consciousness, pointed out that animals rights to be considered as conscious beings naturally followed from his work.

[See <http://medlockandtame.org.uk/minds.html>]

MATHEMATICS

I have also been witness to scorn poured upon mathematical models of animal populations that suggest, counter intuitively, that culls can cause further problems. This it seems comes from a contingent who are mathematically inept or quite purely do not understand the implications or have some axe to grind or chip on their shoulder about science in general.

I should point out that work done by John Conway has shown that relatively unsophisticated mathematical structures can mimic basic capacities of living systems. His program *LIFE*, is able to produce entities that reproduce themselves or create new entities.

Other programs can create leaves, trees, flowers and nearly all natural things under the sun.

Moreover the maths tells us that simple culls are a stupid knee-jerk reaction to a complex web of interacting systems. It is as though faced with a cataract in the eyeball, one takes a mallet and smashes the eye socket to bits and then claims to have solved the problem.

Culling lacks finesse, it lacks understanding of the complex web of life, regardless as to whether one considers it inhumane or unethical.

I find it quite strange that the same people who advocate culls readily accept that mathematical models provide the weather report that on the whole predicts rain or shine. Similar mathematics is at the heart of population dynamics. To attack a species with blind indifference to the knock on effects is an ignorant and uninformed way to deal with controlling the impact of a given organism.

[See <http://medlockandtame.org.uk/flawless.html>
<http://medlockandtame.org.uk/climate.html>]

What has become apparent to mathematicians is that small changes can have large effects. It has been given the emblem of the butterfly, and named "*the butterfly effect*", the idea being that a small change such as the flap of a butterfly's wings can cause knock on changes in the weather system. It is crass and innumerate to hang onto the outmoded idea that nature has simple one for one exchanges. That simply culling a group of geese, only has the effect of getting rid of those geese. It does not.

If one removes the geese then weed that would have been eaten doesn't get eaten and is free to reproduce. Kill badgers and all they predate are free to reproduce. Animals are part of webs, they do not live in isolation.

[See <http://medlockandtame.org.uk/natnum.html>
<http://medlockandtame.org.uk/natnum2.html>]

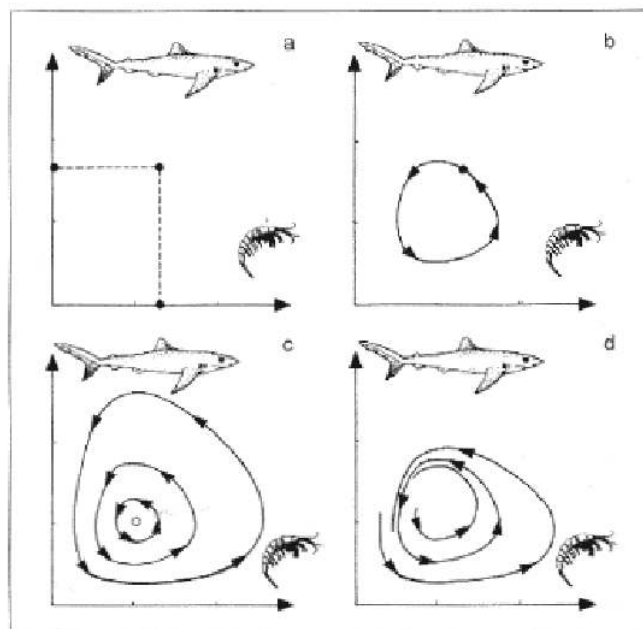


Figure 4.1 The phase space of Volterra's predator-prey model: in **a**, the coordinates of a point represent the initial values of two populations, shark and shrimp; in **b**, the trajectory representing development from an initial pair of population values is a closed loop; in **c**, the phase portrait, representing all possible developments, consists of nested loops; in **d**, a modified model has an attractor towards which all other trajectories spiral. The attractor characterizes the long-term behaviour of the system. Such phase portraits, extended to many dimensions, are helping researchers to understand complicated dynamics in evolving systems.

AESTHETICS

Outside of the practical, we might consider what animals do for the human psyche. I for one am thrilled to see grey squirrels atop the trees. To those that suggest that reds are superseded, one can only suggest that greys get penalized for being nature's winners- they are only doing what human beings do - running amok causing devastation to others merely by being successful and having the attributes of a capable organism. If we apply value judgments to them - then we must also apply them to ourselves, and if we judge them to be culled then we are as guilty and should be so judged.

The point being there is pleasure to be gained in witnessing a live creature living, and none to be gained from its demise.

We have birdwatching organisations, cetacean watchers who protest harpooners, butterfly experts, those who find mammals endearing, rodent lovers....the list is nearly endless of the people who invest time and money protecting animals and habitats, and for why?

Because our lives would be that much less enjoyable if there was a dearth of creatures, and more than anyone green groups are dedicated to the protection of flora and fauna. Culls are an anathema to what we stand for. All life is valuable, and not just for what man can do with it or get out of it, but merely because it is there.

Moreover if we approach managing this planet with a 'sledgehammer to an eyeball' approach rather than the skill of a surgeon, we are not only doing animals a disservice, we are shooting ourselves in the foot.

For if we are ignorant of the complexity of nature and take to it like the boy who stamps on ants, or pulls the wings off insects and have no compassion or understanding, then mankind will deserve the fate that will befall him. Species after species will be found to be requiring of being culled for one expedient reason or another, and thence we will be left with only ourselves, the most selfish, compassionless, earth damaging, genocidal maniacs on this planet.

So if you are in favour of culls, take a look at "homo sapiens" and ask yourself whether a cull is needed?" If you are unwilling to take that step, then do not inflict it on another species.