

# The Place of Animals in Science: Hidden Costs / Hidden Potential

## Bibliography, Resources and Links

(Support document for Panel Discussion and Workshop held at Queen's University on April 22, 2015)

### 1. Organizations whose mandate includes promoting humane education, and alternatives to the use of animals for dissection and learning:

The [New England Anti-Vivisection Society](#) (NEAVS), [InterNICHE](#) (The International Network for Humane Education), [NORINA](#) (Norwegian Inventory of Alternatives) and [Physicians Committee for Responsible Medicine](#) (PCRM) all provide excellent overviews of issues concerning the use of animals in education, up-to-date information on alternatives, and links to relevant research and resources.

[Frogs are Cool](#) is a Canadian website with general facts about dissection, information about alternatives and student choice policies.

[Digital Frog](#) is an Ontario company offering high quality virtual dissection software. [InterNICHE](#) operates a loan system for models and software. [Animalearn](#) also operates a lending library of models and software but these are available in the US only.

[Animal Justice Canada](#) supports Ontario students who wish to exercise their right of conscientious objection to opt out of educational practices that harm animals.

### 2. Books and articles providing an overview of the topic of animal use in education, and examining the efficacy of alternatives:

Balcombe, Jonathan (2000) *The use of Animals in Higher Education: Problems, Alternatives, & Recommendations* (Humane Society Press).

Jukes, Nick and Mihnea Chiuia (2003). *From Guinea Pig to Computer Mouse: Alternative Methods for a Progressive, Humane Education* (Leicester, UK: InterNICHE).

Knight, Andrew (2011) *The Costs and Benefits of Animal Experiments* (London; Palgrave).

Hart, L.A. (2008) *Why Dissection? Animal Use in Education* (London; Greenwood Press)

Patronek, G.J. and A Rauch (2007) "[Systematic Review of Comparative Studies Examining Alternatives to the Harmful Use of Animals in Biomedical Education](#)," *Journal of the American Veterinary Medical Association* 230 (1): 37-43.

Pedersen, Helena (2002) *Humane Education: Animals and Alternatives in Laboratory Classes. Aspects, Attitudes and Implications* (Stockholm; Stiftelsen Forskning utan djurförsök).

Scalese, R.J. and S.B. Issenberg (2005) "[Effective Use of Simulations for the Teaching and Acquisition of Veterinary Professional and Clinical Skills](#)," *Journal of Veterinary Medical Education*.

**3. Research on science education culture, and the psychological impacts on students (and teachers) of dissection and other uses and framings of animals in science education**

Birke, Lynda (2003) "Who – or What- are the Rats (and Mice) in the Laboratory", *Society & Animals* 11:3 p.207-224.

Birke, Lynda (2010) "Structuring relationships: On science, feminism and non-human animals" *Feminism & Psychology*, p 1-13.

Birke, Lynda (2012) "Animal Bodies in the Production of Scientific Knowledge: Modelling Medicine" *Body & Society*, p 1-23.

Capaldo (2004) "[The Psychological Effects on Students of Using Animals in Ways that They See as Ethically, Morally or Religiously Wrong](#)" *ALTA* 32, Supplement 1, 525-53.

Oakley, Jan (2012) "[Science teachers and the dissection debate: Perspectives on animal dissection](#)" *International Journal of Environmental and Science Education*. 7/2.

Oakley, Jan (2012) "[Dissection and Choice in the Science Classroom: Student Experiences, Teacher Responses, an a Critical Analysis of the Right to Refuse](#)", *Journal of Teaching and Learning*. 8/2.

Oakley, Jan (2013) "["I Didn't Feel Right About Animal Dissection": Dissection Objectors Share Their Science Class Experiences](#)", *Society & Animals* 21: 360-378.

Oxford Centre for Animal Ethics Report (2015) [Normalizing the Unthinkable: The Ethics of Using Animals in Research](#). (As the title indicates, the focus is on research, not educational use of animals, but the ethical issues overlap, and this report provides an excellent overview.)

**4. Reports/Articles on Aboriginal science and other approaches to science education (holistic environmental education, multispecies ethnography) which approach animals as sentient subjects, not objects of inquiry:**

[Learning Indigenous Science from Place](#) (2008 Report from the Aboriginal Education Research Centre)

Augustine, Stephen "[Traditional Aboriginal Knowledge and Science versus Occidental Science](#)"

Bird Rose, Deborah, et. al. (2012) "[Thinking Through the Environment, Unsettling the Humanities](#)", *Environmental Humanities*: 1.

Bruchac, Margaret "[Indigenous Knowledge and Traditional Knowledge](#)".

Galloway, Anne: website for "[The More-Than-Human Lab](#)" at Victoria University, New Zealand.

Hartigan, John (2014) Interview [On Multispecies Ethnography](#).

Oakley, Jan et al. (2010) "[Animal Encounters in Environmental Education Research](#)" *Canadian Journal of Environmental Education*.

Raikhel, Eugene (2010) [Blog overview](#) of *Cultural Anthropology* special issue on Multispecies Ethnography.