





#### Introducing ethics in science higher education

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## A Need for Ethics

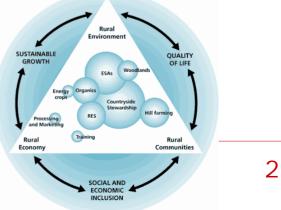
A necessary progress for acceptability

Product acceptability
 Citizen / Consumer



Social acceptability of the animal production sector





# Animal Bioethics: Educational offer in Europe



Aristoteles Project



Teaching Animal Bioethics in Agricultural and Veterinary Higher Education in Europe

held at INPL - Nancy, 23-24 May 2002

#### Workshop Proceedings



#### Survey:

- 17 countries
- 106 institutions
- 199 courses
- 412 teachers

#### Areas:

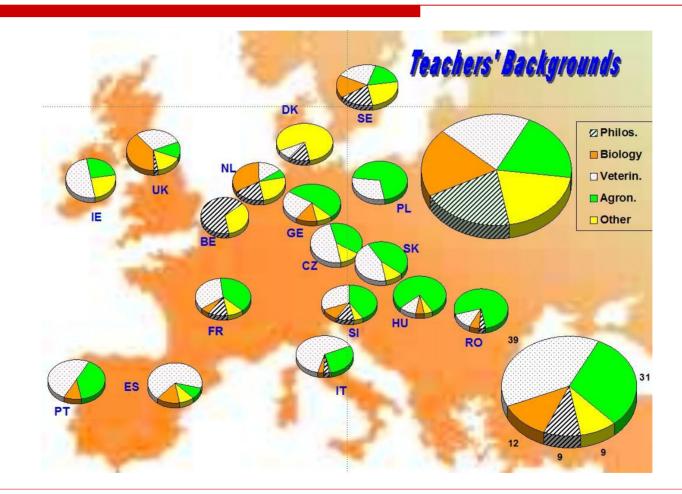
• Farming	86%
<ul> <li>Experiments</li> </ul>	49%
<ul> <li>Companion/Sports</li> </ul>	34%
• Wildlife	28%

#### Keywords:

- legislation
- human-animal relationship
- animal rights
- animal welfare
- environment

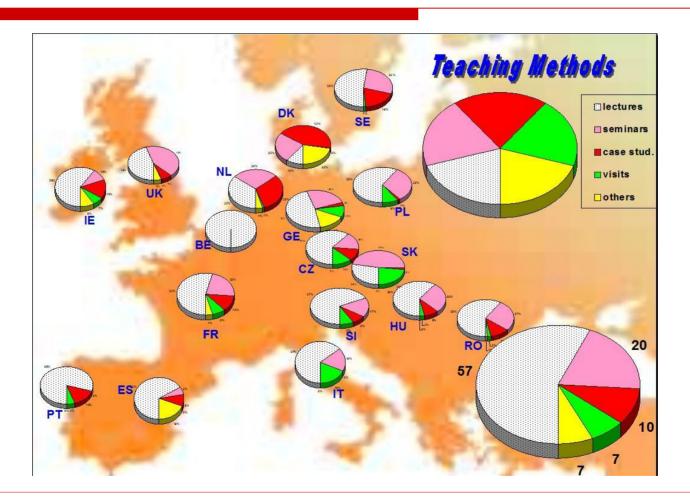


# Animal Bioethics: Educational offer in Europe





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# A M.Sc. module: Bioethics, Science and Society

Master 1 students in biology, food, nutrition, agronomy, environment

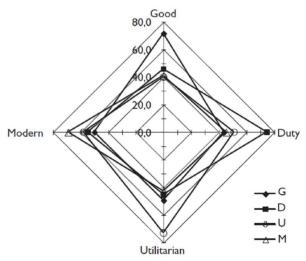
### 30h module

- 14h lectures
- 16h seminars (groups)
- □ Teachers:
  - 1 animal scientist
  - 1 philosopher
  - professionals



Main concepts and bases of moral philosophy (5h L, 10h S)

- Ethical profile (test based on rating of sentences)
- Presentation of schools of thought
  - Virtue
  - Deontology
  - Utilitarianism
  - Modern/Post-Modern
- Case studies





### Case studies

#### □ Small exercises

- write & pass
- classroom distribution
- dilemmas / contrary defence

#### Examples

. . .

- Test of a new antidepressant (rat? monkey?)
- Medication-baby
- Wadden Sea seals
- Xenotransplantation



### Case studies

- Ethical matrix (Ben Mepham)
- Reflexive equilibrium method

#### Examples

- Conflicts between predators and livestock (wolf, bear)
- May the commercialisation of cloned meat be allowed?
- Production of hybrid embryos
- Use of BST in dairy production



# The ethical matrix according to Ben Mepham

(Ben Mepham, 2000, 2004, 2005)

Values

- Well-Being, Welfare
  - Utilitarianism
- Autonomy, Freedom
  - Deontologism
- Justice
  - Rawls
- Stakeholders

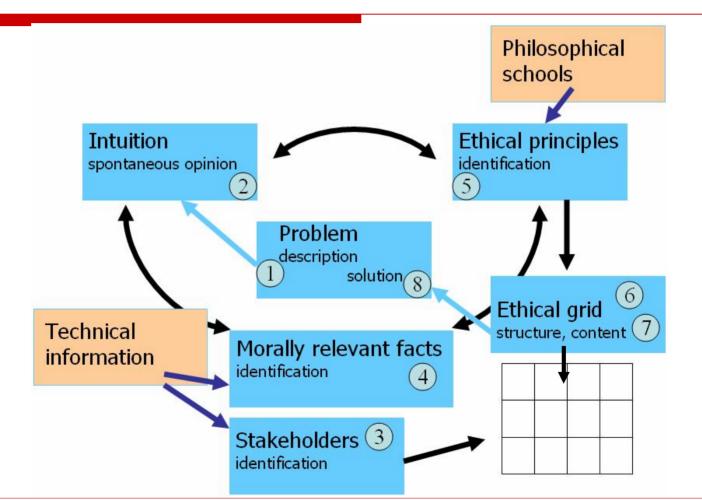


# The ethical matrix according to Ben Mepham

Stakeholders	Well-Being	Autonomy	Justice
livestock	Θ	Θ	Θ
breeders	$\bigcirc \bigcirc \oplus$	$\Theta$	Θ
rural population	⊖ ⊕	•	?
hunters	⊖ ⊕	0	<b></b>
ecologists	$\oplus \oplus \oplus$	$\oplus$	$\oplus$
urban population	$\oplus \oplus \bigcirc \bigcirc$	Ð	$\oplus$
authorities	$\oplus \oplus \bigcirc \bigcirc$	$\oplus$	$\oplus$
ecosystem	$\oplus$ $\oplus$	ŧ	÷
predators	$\oplus$	$\oplus$	÷



# Case studies **Reflexive Equilibrium Method**





van der Burg, W. and van Willigenburg, T. (eds.), 1998. Reflective Equilibrium, Dordrecht, Kluwer 12 Academic Publishers.

# Principles and Teaching Methods



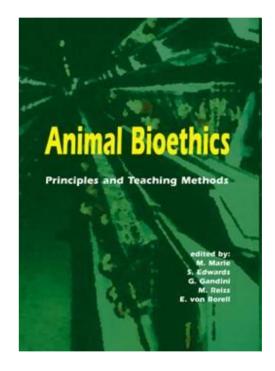


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#### Workshop Proceedings





http://www.wageningenacademic.com/



http://www.ensaia.inpl-nancy.fr/bioethics/workshop.html

## Ethical principles and issues

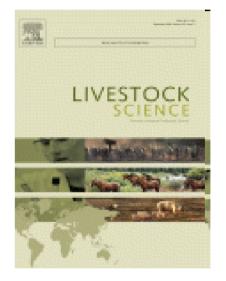


EAAP 55th Annual Meeting

Session ML5 "Ethics in Animal Agriculture"

held in Bled, Slovenia, 7 september 2004.





Ethics in animal agriculture Livestock Science (2006) <u>103</u>, (3), 203-308



http://www.ensaia.inpl-nancy.fr/bioethics/Bled.html

### Home Work

#### Break of 5-6 weeks

- 2000-2500 words analysis, based on an ethical matrix, of a decision of an ethical committee.
  - CCNE
  - European Group on Ethics in Science & New Technologies
  - UNESCO International Committee of Bioethics
  - FAO
  - INRA
  - CCBB



# Science and Society (9h L, 6h S)

- Responsibility of the scientist
- Ethics and research
- Intellectual property
- Ethical committees
- Ethical guidelines
- Citizen conferences



## Methods

#### □ (Problem-based learning)

- □ Role playing
  - Ethical Committee / Parties
  - Genes patentability (Myriad case)
  - Bio-piracy
  - Metagenex case: conflict of interest with the INSERM director
  - Bionic human



## Case studies implementation



#### DESIGN & IMPLEMENTATION OF CASE STUDIES IN ANIMAL ETHICS TEACHING

Workshop Proceedings Dublin 24 – 26 June 2004

Edited by Alison J. Hanlon



**Teaching and Learning Strategies in Animal Bioethics** *Geraldine O'Neill* 

**Teaching Animal Ethics On-Line** Anabela Pinto

Using Problem-Based Learning in Teaching Animal Ethics Deirdre P. Campion, Michael L. Doherty & Alison J. Hanlon

Using Case Studies in Role-Play to Teach Animal Bioethics Humberto D. Rosa

**Critical Success Factors** Alison J. Hanlon, Martin van Iersel, Humberto D. Rosa, Simon Heath & Sandra Edwards



http://www.ensaia.inpl-nancy.fr/bioethics/cases.html

## Module evaluation (N=242)

- Were you aware of ethical questions ? Y: 45,0%
- Are you now ?
- Did you follow similar course before ? Y: 25
- Are you now able to deal with ethics?
- Is this module justified ?
- Did the module met its objectives ?

- Y: 95,8%
- Y: 25,2%
- Y: 87,1%
- Y: 84,4%
- Y: 87,3%

- Discovered
- Gained awareness
- □ Gained know-how



## Conclusion

#### □ Website:

http://www.ensaia.inpl-nancy.fr/marie/bioethique/FAGE03.html

#### Gained from exchange of experience between European teachers

EurSafe ... and EAAP !





# Thank you for your attention