



Enrichment in the Directive and what this means for fish

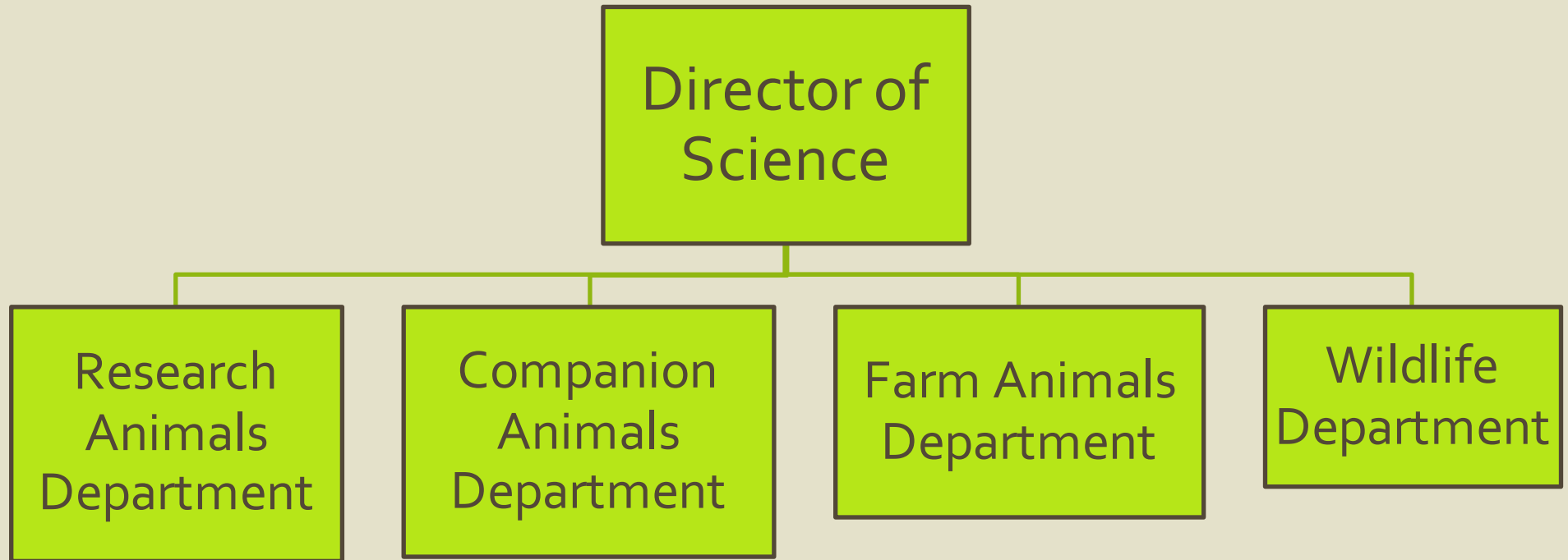
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Helping animals
since 1824

The RSPCA Science Group

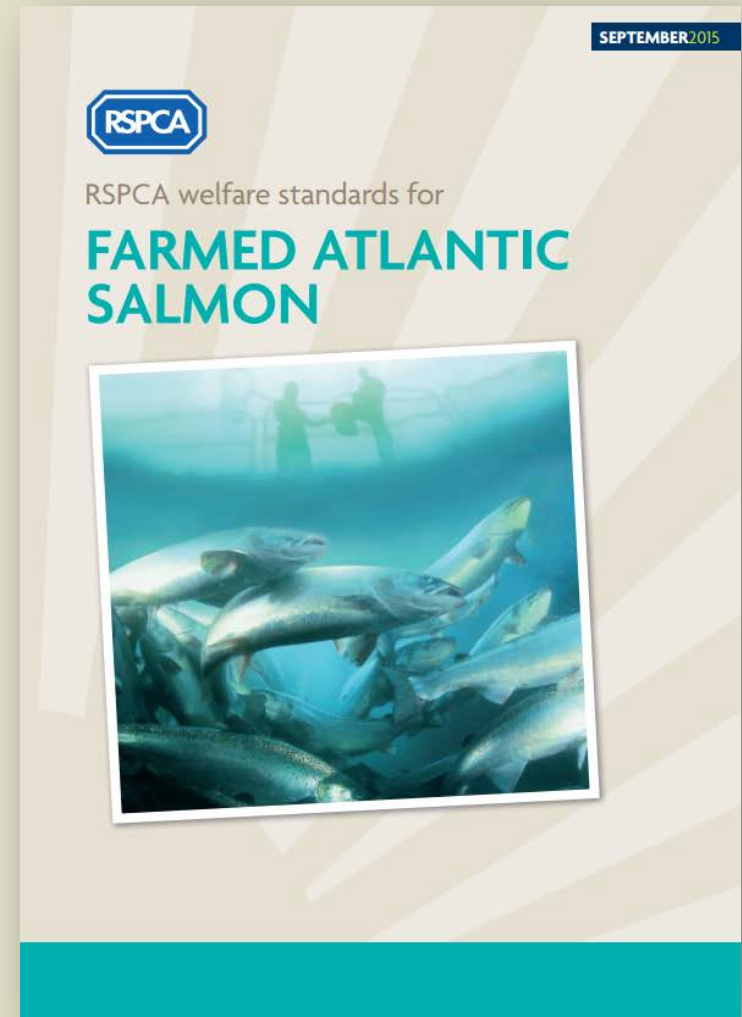


RSPCA strategy – research animals

- Effective **ethical review** of animal use
- Wider implementation of the **3Rs**:
 - Replace animals with humane alternatives
(**Replacement**)
 - Reduce numbers of animals used (**Reduction**)
 - Reduce suffering and improve welfare
(**Refinement**)

RSPCA standards for farmed animals

- Atlantic salmon
- Rainbow trout
- Cleaner fish (ongoing)
- Sea bream?
- Sea bass?





Caring for animals

aiming for better science

DIRECTIVE 2010/63/EU
ON PROTECTION OF ANIMALS USED
FOR SCIENTIFIC PURPOSES



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Environment



A look at the Directive Recitals

PRINCIPLES AND DRIVERS FOR THE LEGISLATION

- New **scientific knowledge** about welfare and capacity for suffering since previous Directive (1986)
- **Attitudes to animals**: demand in Member States for more extensive animal welfare rules
- Animals are **sentient** and have an **intrinsic value** which must be respected
- **Harmonisation** of legislation

Directive 2010/63/EU

ARTICLE 4: PRINCIPLE OF REPLACEMENT, REDUCTION AND REFINEMENT

Member States shall ensure refinement of breeding, **accommodation and care**, and of methods used in procedures, eliminating or reducing to the minimum any possible pain, **suffering, distress or lasting harm** to the animals.

Directive 2010/63/EU

ANNEX III CARE AND ACCOMMODATION

All animals shall be provided with **space of sufficient complexity** to allow expression of a wide range of normal behaviour. They shall be given a **degree of control and choice** over their environment to reduce stress-induced behaviour. Establishments shall have **appropriate enrichment techniques** in place, to extend the range of activities available to the animals and increase their coping activities including **physical exercise, foraging, manipulative and cognitive activities**, as appropriate to the species. Environmental enrichment in animal enclosures shall be adapted to the species and individual needs of the animals concerned. The enrichment strategies in establishments shall be regularly **reviewed and updated**.

Directive 2010/63/EU

ANNEX III GUIDELINES FOR FISH

The water flow shall be appropriate to enable fish to swim correctly and to maintain normal behaviour.

The stocking density of fish shall be based on the total needs of the fish in respect of environmental conditions, health and welfare. Fish shall have sufficient water volume for normal swimming, taking account of their size, age, health and feeding method. **Fish shall be provided with an appropriate environmental enrichment, such as hiding places or bottom substrate, unless behavioural traits suggest none is required.**

Fish shall be fed a diet suitable for the fish at an appropriate feeding rate and frequency. Particular attention shall be given to feeding of larval fish during any transition from live to artificial diets. Handling of fish shall be kept to a minimum.

Commission Recommendation 2007/526/EC

GUIDELINES FOR FISH

For some species, environmental enrichment may be necessary to take account of their behavioural traits, for example, in reproduction or predation. **Examples of such needs include provision of hiding places for wrasse, or substrate such as sand for some flatfish.** Care is needed to ensure that environmental enrichment does not adversely affect water quality, but this should not impede the development of suitable measures to enhance the welfare of fish.

... circular enclosures are most appropriate for salmonids ...



COUNCIL OF EUROPE CONSEIL DE L'EUROPE

Strasbourg, 15 June 2006

Cons 123 (2006) 3

APPENDIX A

**OF THE EUROPEAN CONVENTION FOR THE PROTECTION OF VERTEBRATE ANIMALS
USED FOR EXPERIMENTAL AND OTHER SCIENTIFIC PURPOSES (ETS No. 123)**

GUIDELINES FOR ACCOMMODATION AND CARE OF ANIMALS (ARTICLE 5 OF THE CONVENTION)

APPROVED BY THE MULTILATERAL CONSULTATION

Revision of Appendix A

1998-2006

- Prompted by increase in **scientific knowledge** and experience
- Rising **public awareness and concerns** about animal use
- Aim was to draw up guidelines with a **scientific evidence base**

Expert Working Groups

- Rodents and Rabbits
- Dogs, cats and ferrets
- Non-human primates
- Birds
- Farm animals
- **Fish**
- Amphibians and reptiles

“Use evidence to draw up guidelines that will satisfy behavioural needs: use of space, enrichment, social needs”

felasa

Federation of European Laboratory Animal Science Associations

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Library

The FELASA library contains documents other than workinggroup reports, guidelines, recommendations or policy documents. These can be found under the respective tabs.

- » [ETS123 - Appendix A: guidelines for accommodation and care of animals \(adopted version\). Background information on the draft proposal for species-specific provisions presented by Groups of Experts for: amphibians, birds, cats, dogs, ferrets, non-human primates, reptiles, rodents and rabbits.](#)
- » [Euroguide on the accommodation and care of animals used for experimental and other scientific purposes.](#)
Based on the revised appendix A of the European Convention ETS 123. A joined publication of FELASA, EPAA and Laboratory Animals Ltd.
- » [European directive - 2010/63/EU - on the protection of animals used in scientific procedures.](#)
- » [German Working Group on for Cage Processing in Animal Facilities - Brochure, 2013](#)
- » [Guiding principles on good practice for ethical review processes - LASA / RSPCA report, July 2010.](#)
- » [FELASA - AFSTAL Congress 2004 - Proceedings](#)
- » [FELASA - Scand-LAS Congress 2010 - Proceedings - 'New paradigms in laboratory animal science'](#)
- » [FELASA - SECAL Congress 2013 - Abstracts \(JAALAS\)](#)

Fish Part B is missing!

A raw deal for fish (again)

- Enormous **diversity** of species
 - Although possible to focus on a few widely used spp
- Lack of **evidence** for standards – and lack of good practice?
- **No Part B!**

Table H.2.

Domestic fowl: Minimum enclosure dimensions and space allowances

Body mass (g)	Minimum enclosure size (m ²)	Minimum area per bird (m ²)	Minimum height (cm)	Minimum length of feed trough per bird (cm)
Up to 200	1,00	0,025	30	3
over 200 to 300	1,00	0,03	30	3
over 300 to 600	1,00	0,05	40	7
over 600 to 1 200	2,00	0,09	50	15
over 1 200 to 1 800	2,00	0,11	75	15
over 1 800 to 2 400	2,00	0,13	75	15
over 2 400	2,00	0,21	75	15

**Better
welfare =
better
science**

Where these minimum enclosure sizes cannot be provided for scientific reasons, the duration of the confinement should be justified by the experimenter and determined in consultation with the animal technician and with the competent person charged with advisory duties in relation to the well-being of the animals. In such circumstances, birds can be housed in smaller enclosures containing appropriate enrichment and with a minimum floor area of 0,75 m². These can be used to house two laying birds or small groups of birds in accordance with the space allowances given above.

The way forward (for now)

- **Animal Welfare Body** (AWB) should
 - advise staff on matters relating to welfare, including accommodation and care
 - keep staff informed on 3Rs, technical and scientific developments
- **National Committees** advise AWBs
- **Person responsible** for ensuring staff have information specific to the species on site

Thank you

