

Achievement Standard

Subject Reference Biology 3.4

Title Describe animal behaviour and plant responses in relation to environmental factors

Level 3 **Credits** 4 **Assessment** External

Subfield Science

Domain Biology

Registration date 1 November 2005 **Date version published** 1 November 2005

This achievement standard involves the description of animal behaviour and plant responses in relation to environmental factors.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none">Describe animal behaviour and plant responses in relation to environmental factors.	<ul style="list-style-type: none">Describe animal behaviour and plant responses in relation to environmental factors.Explain animal behaviour or plant responses in relation to environmental factors.	<ul style="list-style-type: none">Describe animal behaviour and plant responses in relation to environmental factors.Discuss animal behaviour or plant responses in relation to environmental factors.

Explanatory Notes

- 1 This achievement standard is derived from *Biology in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1994, p. 28, achievement objective 8.1 (a).
- 2 *Animal behaviour and plant responses* will be selected from those relating to:
 - orientation (tropisms, nastic responses, taxes, kineses, homing, migration)
 - timing (annual, daily, lunar, tidal)

- interspecific relationships (predation, parasitism, mutualism, commensalism, competition for resources)
- intraspecific relationships (territoriality, cooperative interactions, reproductive behaviours, hierarchical behaviour, competition for resources).

3 The relationship of environmental factors to behaviour/response may be in terms of the process involved or the adaptive significance.

4 Terms

- *Describe* requires the student to define, use annotated diagrams, give characteristics of, or an account of.
- *Explain* requires the student to provide a reason as to how or why something occurs.
- *Discuss* requires the student to show understanding by linking biological ideas. It may involve students in justifying, relating, evaluating, comparing and contrasting, and analysing.

Quality Assurance

- 1 Providers and Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against achievement standards.
- 2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference

0226