In order to provide you and your class with a useful and enriching learning experience CPAWS has designed its Grade 11 Grizzly Bears Forever program to cover the following curriculum requirements:

**Unit B:**
**Ecosystems and Population Change**

**General Outcome 1:**
Explain that the biosphere is composed of ecosystems, each with distinctive biotic and abiotic characteristics.

**General Outcome 2:**
Explain the mechanisms involved in the change of populations over time.

**Specific Outcomes for Knowledge**
- Define species, population, community and ecosystem, and explain the interrelationships among them.
- Explain how terrestrial ecosystems support a diversity of organisms through a variety of habitats and niches.
- Identify biotic and abiotic characteristics and explain their influence in a terrestrial ecosystem in the local region.
- Explain how limiting factors influence organism distribution and range.
- Explain the fundamental principles of taxonomy and binomial nomenclature, using modes of nutrition at the kingdom level and morphological characteristics at the genus/species level.
- Explain that variability in a species results from heritable mutations and that some mutations have a selective advantage.
- Discuss the significance of sexual reproduction to individual variation in populations and to the process of evolution.
- Explain speciation and the conditions required for this process.

**Specific Outcomes for Science, Technology and Society**
- Evaluate the impact that human activity has had, or could have, on the biodiversity in an ecosystem.

**Specific Outcomes for Skills**
- Hypothesize the role of biotic and abiotic factors in ecosystems.
- Analyze the interrelationship of biotic and abiotic characteristics that make up the ecosystem studied.
- Compile and organize evidence from a variety of sources, for or against human activity being responsible for ecosystem change, and analyze the relationship between human activity and changing ecosystems.

For more information, please visit www.cpaws-southernalberta.org/campaigns/education

Or contact us
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