Anthropocene Crisis: Urban Bees to Bridge the Human/Nature Divide

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Human/Nature Dualism

Human > Nature
Nature

Not Nature?
“The unit of survival is not the individual or the species, but is the organism-and-its-environment. It follows from this that an organism that deteriorates its environment commits suicide” (Rose & Robin, 2004, n.p.).
A Healthy Diet

1/3 of global food production volume relies on pollinators to some degree
Source: Klein, 2007

80% of flowering plants are pollinated by honeybees and other insects
Source: Calderone, 2012

U.S. Agriculture

$18 Billion Per year
The amount of dollars of U.S. agricultural production supported by honeybee pollination
Source: USDA

Canadian Agriculture

$1.5 Billion
The annual value of honey bee pollination in Canada.
Source: Agriculture and AgriFood Canada

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<thead>
<tr>
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<th>Anthropocentric</th>
<th>Non-anthropocentric</th>
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</thead>
<tbody>
<tr>
<td>Instrumental</td>
<td>Total Economic Value: personal use and non-use (inc. existence value related to others' use)</td>
<td>The values of other animals, species, ecosystems etc. (independent of humans)</td>
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<tr>
<td>Intrinsic</td>
<td>“Stewardship” value (unrelated to any human use)</td>
<td>Value an entity possesses independently of any valuer</td>
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Source: adapted from Turner et al. 2005.
800+ native bees in Canada
20,000 species globally
7 kinds of honeybee (1 in Canada)
Bees & People

• “How can we possibly value, in monetary terms, the loss of a species” forever? (Atkins & Atkins, 2016, pg. 4)
Theoretical Framework
Power

- Largely hierarchical
- Controlling or dominating a subservient nature
- Conspicuous lack of reciprocity

Ego-Logical

Authoritarian ~ Dualistic ~ Unsustainable
Delusional ~ Mechanistic ~ Self-destructive
Unwise ~ Imbalanced ~ Power Seeking

Christopher Chase, 2014
• Honey bees are not an endangered species

• In Canada, we have 7 species of native bees that are endangered or of concern:
  o Gypsy Cuckoo Bumble Bee
  o Macropis Cuckoo Bee
  o Rusty-patched Bumble Bee
  o Sable Island Sweat Bee
  o Western Bumble Bee mckayi subspecies
  o Western Bumble Bee occidentalis subspecies
  o Yellow-banded Bumble Bee

Red Belted Bumble Bee
(Bombus rufocinctus)
Othering
Informal Economy

• Contributions include:
  o Aesthetic and cultural value
  o Education in outdoor classrooms/schoolyard gardens
  o Therapeutic benefits
  o Health and well-being
Praxis

- Sweat bee: climbed onto my thumb while teaching a class about the campus as a pollinator habitat!
Squash Bee
THANK YOU!