

Re: Evolution and Love

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- *From:* William Morse <wdmorse@xxxxxxxxxxxxx>
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"Kartik Rajan" <rajan.kartik@xxxxxxxxxx> wrote in [news:dmnem7\\$2ud5\\$1@darwin.ediacara.org](mailto:news:dmnem7$2ud5$1@darwin.ediacara.org):

- > The choice of polygamy vs monogamy in species may be based on group
- > dynamics in a particular species, based on their habitat, diet etc.
- > Polygamy as an evolutionary strategy has the advantage that it allows
- > individuals to spread their genes in a large number of offspring. Such
- > individuals store their 'eggs' in a number of 'baskets' and pass their
- > genes on to the next generation by virtue of numbers.
- > In monogamous species, the individuals of both sexes contribute more or
- > less equally in bringing up their offspring. The males parent less
- > offspring and store all their eggs in one basket so to speak. They
- > invest considerably more in each offspring.

You are intermingling two different concepts – K vs. r selection, and relative parental investment. K selected animals have few offspring and invest a lot of resources in each, while r selected animals have many offspring and invest few resources in each.

According to the parental investment theory, animals with much greater total female parental investment are polygynous, those with equal male and female parental investment are monogamous, those with greater male parental investment are polyandrous. But you can have an animal that is K selected but polygynous (e.g. deer), or an animal that is r selected but monogamous (e.g. some of the cichlid fishes)

- > Some believe, love is an evolutionary adaptation that ensures that in
- > monogamous species both individuals, stay together. This ensures that
- > their offspring are adequately cared for till they mature.
- > Monogamy is not a universal trait though, it exists in species where it
- > offers an advantage over polygamy based on their surroundings,
- > behaviour, diet etc.
- > I don't know if anyone has actually checked if polygamous animals
- > 'experience' feelings of love, but they probably don't as love is most
- > likely characteristic of pair bonding monogamous species.

Statements about what feelings other animals experience can only be

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informed conjecture, at least until our understanding of neurobiology is a heck of a lot better than it is today. But many animals appear to "love" their children; dogs show something like "love" to their masters; and many animals show signs of friendships that are very akin to "love". So while I agree that love is characteristic of pair bonding monogamous species, I think an emotion very similar in character exists among other species.

Yours,

Bill Morse

- ***Follow-Ups:***

- ◆ ***Re: Evolution and Love***

- ◇ *From:* Glen M. Sizemore

- ***References:***

- ◆ ***Re: Evolution and Love***

- ◇ *From:* Kartik Rajan

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