

THE AMERICAN BIOLOGY TEACHER



About Our Cover

Shown on this month's cover are two bonobos (*Pan paniscus*) that are part of a bonobo colony at the Jacksonville Zoo and Gardens in Jacksonville, Florida. Only nine facilities hold this endangered species in North America. Bonobos are found naturally living only in the Democratic Republic of Congo, and it is estimated that a minimum of only 15,000 to 20,000 bonobos remain in the wild.

Bonobos and chimpanzees both share ~98% of their genome in common with humans. Genomic mapping suggests that more than 4 million years ago, a common ancestor developed into humans, followed by chimps and bonobos diverging to become distinct species about 1 million years ago. It is amazing to realize that bonobos and chimpanzees are more closely related to humans than they are to gorillas!

Although bonobos and chimpanzees are ~99% genetically similar to each other, they display several important behavioral differences. Strong bonds form in bonobo society, particularly among females, and they appear to use frequent same-sex sexual activity to reinforce these bonds, resolve conflict, and calm aggression. In contrast, chimpanzees are male dominant and have demonstrated the use of physical violence to settle conflict and lethal aggression toward other chimpanzee groups. "Make love, not war" seems to be the guiding mantra of bonobo society, in contrast to chimpanzee society (and, many might say, human society as well).

The image was taken at the Jacksonville Zoo and Gardens, using a monopod-mounted Sony SLT-A77V with a Sony 70-440 GSSM lens at 360 mm. The photographer is James Ekstrom, Professor Emeritus in Science at Phillips Exeter Academy in Exeter, New Hampshire (jimekstrom8@gmail.com).

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