

The evolutionary triumph of flower power

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Flowers have flourished - their beauty evolving over time - simply because we like them, says Terry McGuire, associate professor of genetics at Rutgers and co-author of a paper that examines for the first time the whys and wherefores of flowering plants in an evolutionary context.

While flowers originally came on the scene to attract potential pollinators like bugs and birds, it is their appeal to humans that accounts for the incredible variety of shapes and colors we see in domesticated flowers today. McGuire suggests that nature's prettier flowers got to survive and thrive because people didn't destroy them when they cleared land for agriculture. Instead, they cultivated them and have been doing so for more than 5,000 years.

Ironically, many domesticated flowers have been so selected by humans that nature's pollinators - the bugs and birds - no longer find them attractive. So the job of propagating the species depends mainly on us.

An article in the journal "Evolutionary Psychology" by McGuire; Jeannette Haviland-Jones, a professor of psychology at Rutgers; and others, states that in spite of some basic survival uses such as edible or medicinal flowers, most flowering plants grown in the flower industry today are not used for any purpose other than emotional satisfaction.

"Our hypothesis is that flowers are exploiting an emotional niche. They make us happy," McGuire says. "Because they are a source of pleasure - a positive emotion inducer - we take care of them. In that sense they're

like dogs. They are the pets of the plant world."

Psychologist Haviland-Jones had conducted three studies that tested the ability of flowers to induce positive emotion. The objective was to demonstrate the immediate, long-term and powerful effects of flowers on emotional reactions, mood, social behaviors and even memory in both men and women. The results of these three studies were so positive that the researchers went on to develop the evolutionary emotional niche model.

"Flowers have been ignored for the most part in the literature on plants and people," McGuire says. "Perhaps they have been overlooked because their nature and beauty is so obvious. It is hard to imagine that we might have been responsible at least in part for their appearance. With the proposed model of evolution and adaptation to a human emotional niche, perhaps we have a clearer picture of our floral companions."

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Source: State University of New Jersey

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