

WHEN IT'S BEES VS. ANTS, NOBODY WINS



BUMBLE BEES ARE UNDER IMMENSE PRESSURE FROM HABITAT LOSS, DISEASE & PESTICIDES.



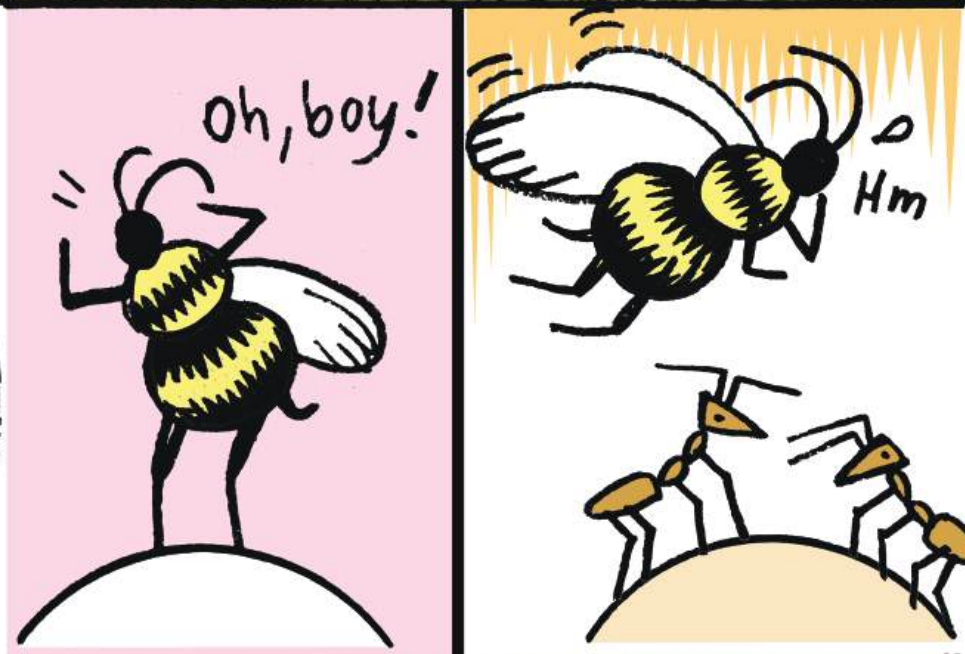
Wow. I am stressed OUT.

MICHELLE MINER, WHO EARNED A MASTER'S DEGREE IN ENTOMOLOGY FROM UCR, WONDERED WHETHER INVASIVE ARGENTINE ANTS MIGHT BE ADDING TO THAT STRESS.

HER RESEARCH, PERFORMED IN UCR PROFESSOR ERIN WILSON RANKIN'S LAB AND PUBLISHED LAST YEAR, ANALYZED OVER 4300 INDIVIDUAL BEHAVIORS FROM MORE THAN 415 BUMBLE BEES.

SOMETIMES CALLED SUGAR ANTS, ARGENTINE ANTS ARE ANYTHING BUT SWEET.

WITH HOW IMPORTANT BUMBLE BEES ARE AS POLLINATORS, IT MADE SENSE TO TRY AND UNDERSTAND MORE ABOUT WHAT'S GOING ON IN THESE TINY NECTAR WARS.



THE EXPERIMENTS INVOLVED SIX SEPARATE BUMBLE BEE COLONIES FORAGING IN A SHARED AREA. THE BEES COULD CHOOSE FEEDERS THAT EITHER HAD ARGENTINE ANTS NEARBY OR WERE ANT-FREE.

THE AGGRESSIVE INSECTS DON'T STING, BUT THEY DO BITE AND CAN DOMINATE A FOOD RESOURCE, OVERWHELMING OTHER INSECTS JUST WITH SHEER NUMBERS.

GIVEN THE CHOICE, BEES AVOID ANTS. THE MORE ANTS AT A FEEDER, THE LESS LIKELY THE BEES WERE TO ATTEMPT FEEDING THERE. STILL, IF PROVOKED, SOME BEES FOUGHT BACK, USING THEIR MANDIBLES (JAWS) TO FIGHT THEIR ANT ADVERSARIES.



THANKS IN PART TO THEIR MUCH LARGER SIZE, BUMBLE BEES WERE GENERALLY VICTORIOUS IN ONE-ON-ONE FIGHTS AGAINST ANTS IN THE STUDY. BUT THAT LIKELY DOESN'T TRANSLATE INTO A WIN FOR THE ENTIRE BEE COLONY.

INSTEAD OF RETURNING TO FORAGING, BEES OFTEN STAYED LOCKED IN FURTHER CONFRONTATIONS, WASTING ENERGY AND RISKING INJURY RATHER THAN BRINGING FOOD BACK TO THE HIVE.

PROF. WILSON RANKIN



WHETHER THE HIVE COMPENSATES FOR LOST FOOD IS UNKNOWN.



WE DON'T KNOW IF THE COLONY SENDS OUT ADDITIONAL FORAGERS WHEN ONE COMES BACK SHORT. THAT'S THE NEXT QUESTION IT'S IMPORTANT TO ANSWER.