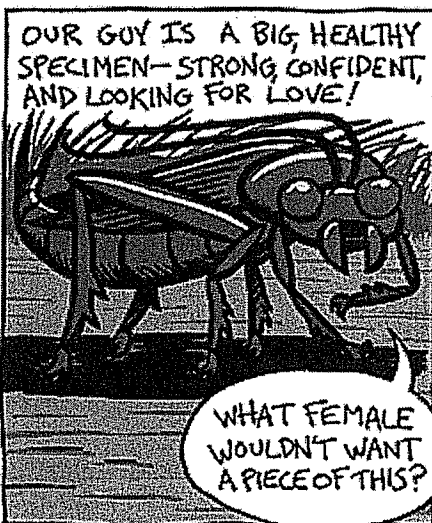
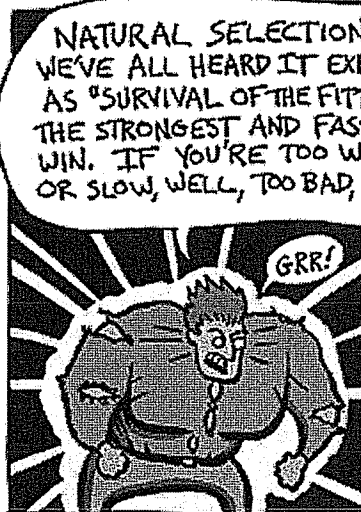


Survival of the Sneakiest

by the *Understanding Evolution* team at http://evolution.berkeley.edu/evolibrary/article/0_0_0/sneakermales_01

"Survival of the fittest" means that the strong succeed, and the weak fail, right? Well, often that's how it's portrayed, but the real story is a bit trickier. Let's take a closer look at what the crickets do...



NOT FAR AWAY, A FEMALE CRICKET LIKES WHAT SHE HEARS...



OH YEAH!
MY EXOSKELETON
IS SOOO GLOSSY!
I'M PARASITE FREE!

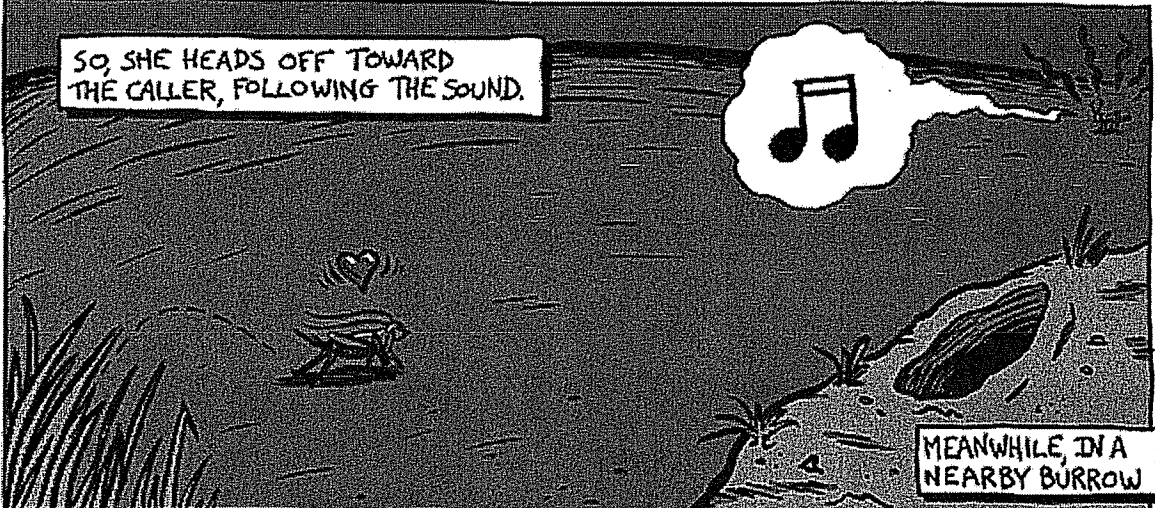
OH MY!



THAT'S ONE HUNKA
HUNKA BURNIN' CRICKET!
JUST THE KIND OF MALE
I WANT TO FERTILIZE
MY EGGS!

drool!

SO, SHE HEADS OFF TOWARD
THE CALLER, FOLLOWING THE SOUND.



MEANWHILE, IN A
NEARBY BURROW



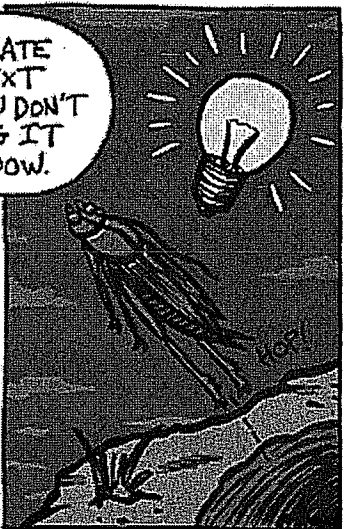
OH GIRL, YOU MAKE MY
ANTENNAE TREMBLE!
TOGETHER WE CAN
MAKE EXTREMELY
FIT OFFSPRING!

WILL YA LISTEN TO
THIS BLOWHARD?

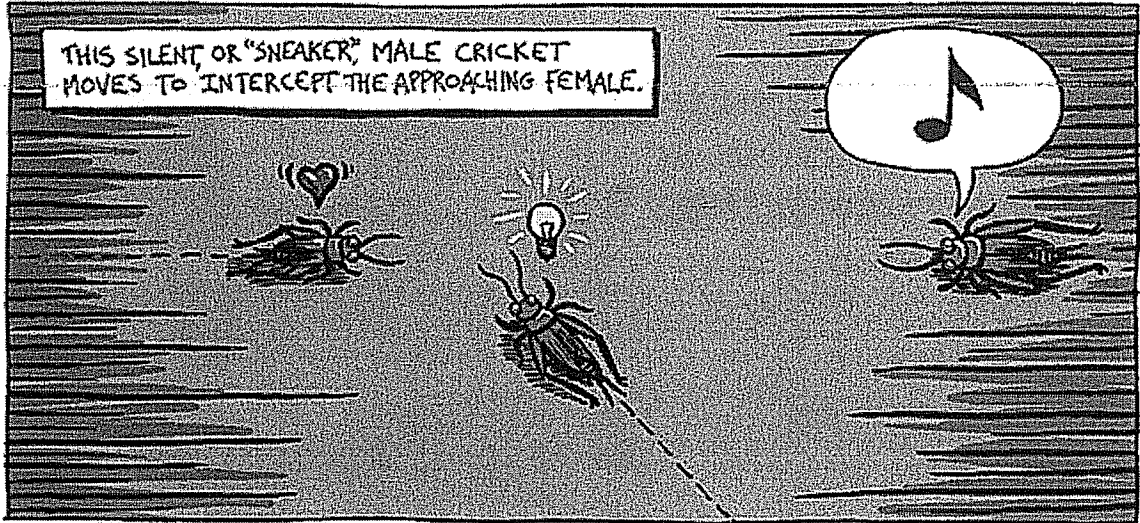


I MEAN, I WANNA MATE
AS MUCH AS THE NEXT
GUY CRICKET, BUT YOU DON'T
HEAR ME ANNOUNCING IT
TO THE WHOLE MEADOW.

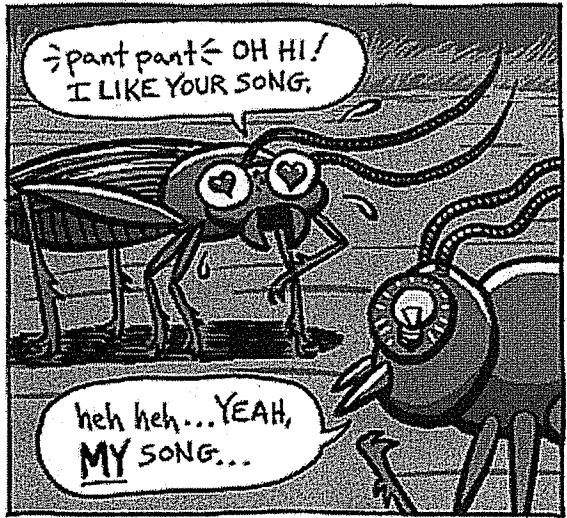
ACTUALLY, THAT
GIVES ME AN IDEA.



THIS SILENT, OR "SNEAKER," MALE CRICKET MOVES TO INTERCEPT THE APPROACHING FEMALE.

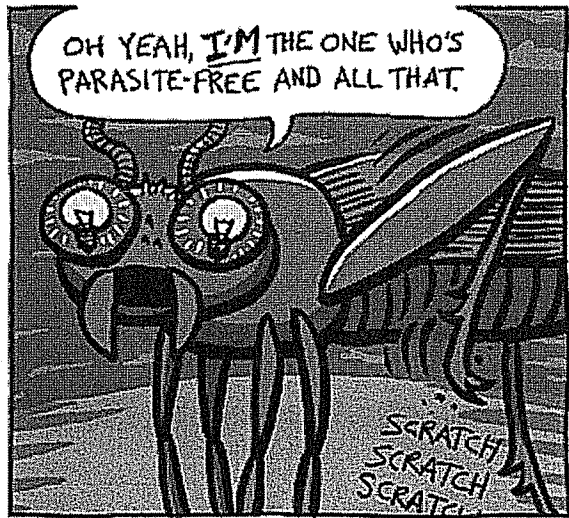


>pant pant< OH HI!
I LIKE YOUR SONG.

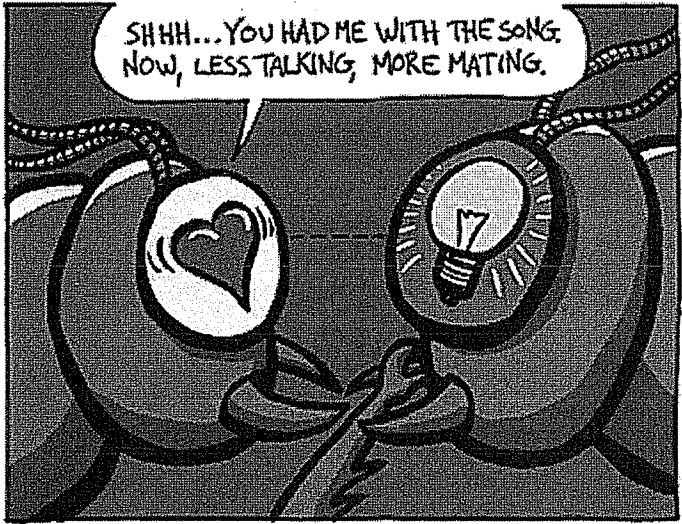


heh heh... YEAH,
MY SONG...

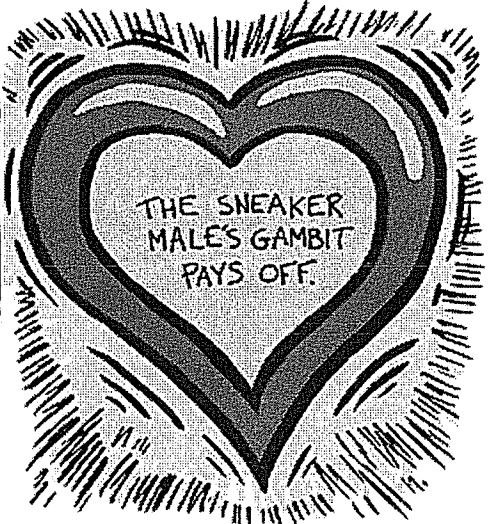
OH YEAH, I'M THE ONE WHO'S
PARASITE-FREE AND ALL THAT.



SHHH... YOU HAD ME WITH THE SONG.
NOW, LESS TALKING, MORE MATING.



THE SNEAKER
MALE'S GAMBIT
PAYS OFF.



AND OUR ORIGINAL, STRONG, LOUD, CALLING MALE IS OUT OF LUCK.



LAST CHANCE FOR YOU
SPECIAL LADIES TO... uh...
MEET A REALLY GREAT GUY..?

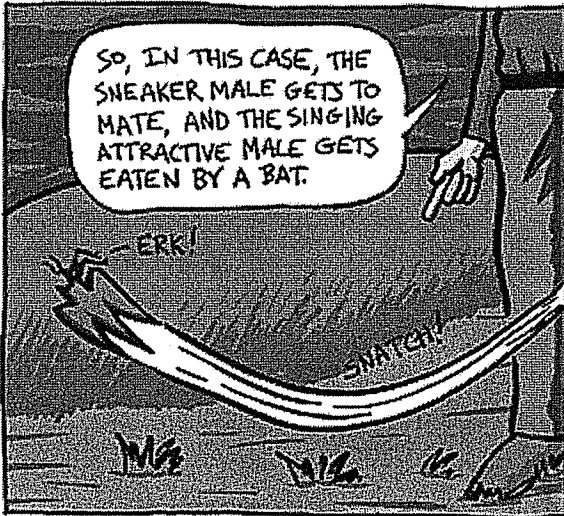
AW, FORGET IT.

IN FACT, HIS SONG HAS ATTRACTED SOME UNWANTED ATTENTION.



I'M ALMOST THERE...
KEEP CHIRPING, YOU
BIG, JUICY BOZO!

FEETS, DON'T
FAIL ME NOW!



SO, IN THIS CASE, THE
SNEAKER MALE GETS TO
MATE, AND THE SINGING
ATTRACTIVE MALE GETS
EATEN BY A BAT.

ERK!

SNATCH!

SEE, "SURVIVAL OF THE FITTEST" ISN'T
NECESSARILY ABOUT BEING THE TOUGHEST,
FASTEST, OR MOST ATTRACTIVE. IT'S
REALLY ABOUT SURVIVING TO PASS THE
GENES THAT ENCODE TRAITS AND
BEHAVIORS ON TO OFFSPRING



MAYBE OUR SNEAKER MALE'S KIDS WILL
INHERIT THE "SNEAKY" GENES, AND IN
TURN USE SNEAKY BEHAVIOR LIKE THEIR FATHER.

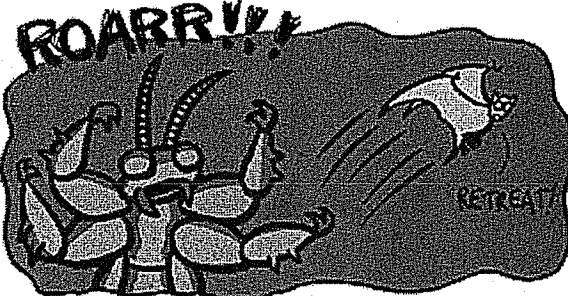


WHY WASTE OUR ENERGY SINGING
WHEN SOMEONE ELSE WILL DO
IT FOR US?

I'M NO CHUMP

HEH
HEH.

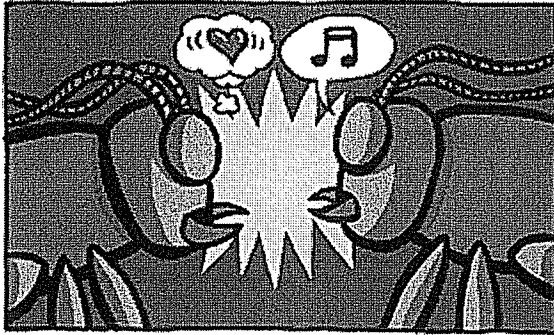
OF COURSE, TOUGHNESS CAN HELP TO
INCREASE AN ORGANISM'S CHANCE OF
LIVING LONG ENOUGH TO REPRODUCE...



...BUT REPRODUCTION AND THE PASSING ON OF
GENES ARE MOST IMPORTANT IN TERMS OF
EVOLUTION. AND THERE ARE MANY WAYS THAT
AN INDIVIDUAL CAN GET THEIR GENES INTO
THE NEXT GENERATION.

CALLING IS STILL A GOOD STRATEGY FOR MALE CRICKETS TO INCREASE THEIR CHANCE OF MATING. FEMALES ARE ATTRACTED TO CALLING MALES, AND THERE WON'T ALWAYS BE SNEAKERS OR PREDATORS AROUND TO DERAILED THE CALLERS.

AND IF THEY ALL USED THE SILENT, SNEAKER STRATEGY, THEN NO FEMALES WOULD BE ATTRACTED AT ALL, AND THE MALES WOULD HAVE SOME LONG, LONELY NIGHTS.

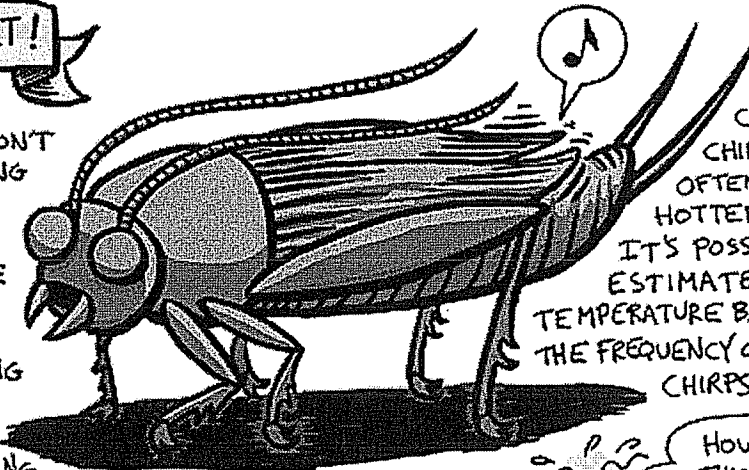


SO, WE END UP WITH A VARIETY OF SUCCESSFUL MATING STRATEGIES. THAT'S HOW NATURAL SELECTION WORKS. THERE IS NO ONE, TRUE, ULTIMATE SURVIVAL STRATEGY. A SUCCESSFUL STRATEGY IS WHATEVER GETS THE JOB DONE.

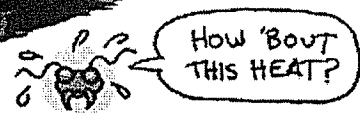


EXTRA CRICKET!

CRICKETS DON'T ACTUALLY SING WITH VOICES, LIKE BIRDS OR PEOPLE. THE MALE CRICKET'S SONG IS MADE BY SCRAPING ONE WING ACROSS ANOTHER, SORT OF LIKE A VIOLIN BOW SCRAPING ACROSS A STRING.



CRICKETS CHIRP MORE OFTEN IF IT'S HOTTER. IN FACT, IT'S POSSIBLE TO ESTIMATE THE TEMPERATURE BASED ON THE FREQUENCY OF CRICKET CHIRPS.



Discussion questions

1. When it comes to crickets, what does fitness mean?
2. Is calling good or bad for a cricket's fitness?
3. Give some examples of selection at work in this cricket story.
4. How does selection favor calling? How does selection favor not calling?