

Too young to win a prize in Stockholm this December? We don't think so.



AAAS.ORG | FEEDBACK | HELP | LIBRARIANS

Daily News

ADVANCED ALERTS | ACCESS RIGHTS | MY ACCOUNT | SIGN IN

News Home | Hot Topics | Categories | From the Magazine | ScienceNow | ScienceInsider | ScienceLive | About Us

News » ScienceShots » Plants & Animals » ScienceShot: How to Confuse a Predatory Fish

SARAH C. P. WILLIAMS

# ScienceShot: How to Confuse a Predatory Fish

2013-07-16 19:00 | [0 Comments](#)



Karin Kjærnsmo

The deceptively eyelike spots on the back ends of swimmers like the butterflyfish (pictured) might not scare off predators, but they do mess up their aim, a new study has concluded. Scientists had previously hypothesized that fish evolved eyespots either to scare off or to misdirect their enemies, but data have been hard to come by. In the study, researchers trained predatory three-spined sticklebacks (*Gasterosteus aculeatus*, inset) to attack strips of paper by hiding food rewards underneath. Each strip had either no eyespot, an eyespot smaller than the stickleback's own eye, or a larger eyespot. The stickleback attacked each type of prey at the same speed when being released into the aquarium, showing that the larger eyespot didn't act as a deterrent and that neither size dot made the prey any easier to find. When eyespots were present, the stickleback were most likely to aim their attack directly toward the spot, wherever it was located, the scientists report online today in the journal the *Proceedings of the Royal Society B*. The finding is the first report that [eyespot location affects predation tactics](#), and it supports the hypothesis that the spots evolved because they help prey. Whether such misdirected attacks help eye-spotted prey in the wild survive a fight or lower their chances of being attacked in the first place still remains to be seen, and the results don't rule out other benefits of the eyespot, such as catching the attention of potential mates.

POSTED IN: [PLANTS & ANIMALS](#) |

## RELATED STORIES



Monogamy May Have Evolved To Prevent Infanticide



Video: Fish Feel Their Way Around Obstacles



How To Grow A New Head

WHAT'S NEW

FROM THE MAGAZINE

**Science Careers**

There's only one GALILEO GALILEI

For your career in science, there's only one **Science**

- Career Advice
- Job Alerts
- Job Postings
- Career Forum
- Booklets
- Webinars

AAAS All for FREE! Register today [ScienceCareers.org](#)

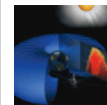
## POPULAR

MOST READ | [MOST COMMENTED](#)

- Swirls in the Afterglow of the Big Bang Could Set Stage for Major Discovery
- 'Space Vikings' Spark NASA Inquiry
- 'Total Recall' for Mice
- Why Some Species Thrived When Dinosaurs Died
- Yes, You Can Blame the Moon for a Bad Night's Sleep

## FROM THE MAGAZINE

26 July 2013, Vol. 341, No. 6144



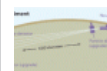
**The Savage Radiation of the Van Allen Belts Is Homegrown**

The solution to a decades-old space mystery may help save satellites from deadly radiation.



**An Invisible Hand Behind Plan to Realign U.S. Science Education**

Meet the master bureaucrat behind President Obama's controversial proposal to reshuffle the federal government's \$3-billion-a-year investment in STEM education.



**At an Impasse, U.S. Particle Physicists Gather by the River to Plan and Dream**

As particle physicists in Europe and Japan rack up major discoveries such as the Higgs boson, their counterparts in the United States are about to meet in Minneapolis-St. Paul, Minnesota, to explore options for reviving their own lagging research program.

[MORE FROM SCIENCE MAG](#)

ADVERTISEMENT



29 JUL 2013 | **BIOLOGY**  
**ScienceShot: Amoeba 'Farmer' Uses Organic Pesticide**  
Unusual microbe protects its

bacteria "crops"



29 JUL 2013 | **BIOLOGY**  
**Monogamy May Have Evolved To Prevent Infanticide**

Humans and other primates may stay together to keep their babies from being killed by rival males



29 JUL 2013 | **ARCHAEOLOGY**  
**'Llullaillaco Maiden' May Have Been Drugged Before Sacrificed**

Mountain mummies test positive for alcohol and coca

**NH Teaching Units, Cherished in Schools, May Be Shredded**

**The Savage Radiation of the Van Allen Belts Is Homegrown**

**For Scientists, Protests Morph Into Fight for Academic Freedom**

**Fragile Wetland Will Test Turkey's Resolve in Protecting Biodiversity**

**Indispensable Outsider**

**An Invisible Hand Behind Plan to Realign U.S. Science Education**

**Clinical Trials Paused as India Adopts New Rules**

**Bacterial Meningitis Finds New Niche in Gay Communities**

**Biologists Tell Dueling Stories of How Turtles Get Their Shells**

**At an Impasse, U.S. Particle Physicists Gather by the River to Plan and Dream**

0 comments



Leave a message...

Newest ▾ Community

Share

No one has commented yet.

ALSO ON SCIENCE NOW

[What's this?](#)

[ScienceShot: How to Confuse a Predatory Fish](#)

3 comments • 13 days ago



Unwelcome guest — Predatory fish must be pretty stupid

[Gut Microbes Can Split a Species](#)

21 comments • 12 days ago



Calladus — How many scientists have cited your peer reviewed works? Hint: Less than one. wacky Creationist is ...

[Apes Capable of 'Mental Time Travel'](#)

20 comments • 12 days ago



creationismrulezzz — B.A. in biology -your argument(s) are invalid

[ScienceShot: A Smokestack's Hidden Treasure](#)

17 comments • 7 days ago



Edward Berry — Sounds like a perpetual motion machine to me- the CO2 isn't consumed. Basically the ...

Comment feed Subscribe via email



**SCIENCEINSIDER**

Breaking news and analysis from the world of science policy

[Legal Fight Darkens Leading AIDS Website](#)

[After 6-Week Journey, Giant Magnet Arrives at Fermilab](#)

['Space Vikings' Spark NASA Inquiry](#)

[Forty-Three University of Tokyo Papers Are Tainted, Says Japanese News Report](#)

[European Commission Lays Groundwork for EU-Funded Defense Research](#)

[Top Contenders Blast Pentagon's New DNA Prize](#)

[SEE MORE](#)

**VIDEO**

[Video: Fish Feel Their Way Around Obstacles](#)



News Science Journals Careers Blogs and Communities Multimedia Collections Help Site Map RSS  
Subscribe Feedback Privacy / Legal About Us Advertise With Us Contact Us

© 2012 American Association for the Advancement of Science. All Rights Reserved.  
AAAS is a partner of HINARI, AGORA, OARE, PatientInform, CrossRef, and COUNTER.