

## MUTUALISM: WHEN ANIMAL ENEMIES UNITE

From *Does God Exist?* November/December 2009 Issue page 24, "Dandy Designs"



One of the most interesting situations in nature is that in which two enemies tolerate each other, bringing benefits to both of them. In *National Wildlife* magazine (April/May 2008, page 18) is a story about two enemies "that seem to have an agreement" not to damage each other. This is an example of what is called a mutualism relationship, a situation where two animals benefit each other and protect each other.

The two animals are a tarantula and narrow-mouthed toad. Normally tarantulas eat toads, but in this case the toad will move into the tarantula's humid burrow which is ideal for the toad. Any animal that would eat the toad will not invade the burrow, because the tarantula will attack it. What the toad does for the tarantula is to eat the ants and other pests that will eat the tarantula's eggs. When researchers offered other species of toads to the tarantulas, they ate them. In the middle of such offerings, when a narrow mouth toad was offered it was spared.

Another example in fresh water lakes is the relationship between a minnow called a golden shiner and a bowfin or dogfish. The bowfin feeds on this minnow normally, but during the spawning season the minnows seem to have immunity from bowfin attacks. The bowfin builds a nest and the minnows dart in and out of the nest, providing oxygen and keeping bacteria out. The minnows lay their own eggs in the nests of the bowfin and not only do not have to go to the trouble of building the nest, but have a built-in protector to keep the eggs from being eaten by predators. There are as many as 35 minnow species that have similar associations with their predators.

The question is how such mutualism develops. It seems as though the animals involved think through what will be to their advantage and avoid normal food patterns, but no one believes that to be the case. Instead there seems to be a genetically programmed response that is highly sophisticated so that it works at certain times of the year with certain species. We would suggest that an Intelligence has created a beautifully designed system of mutualism which promotes the development and diversification of life. That Intelligence is God.

For additions or corrections to the directory please contact Mike Mendez

Church of Christ, P.O. Box 231005, Sacramento, CA 95833  
(916) 428-1956 / 428-1967 website: [www.mackroadchurchofchrist.com](http://www.mackroadchurchofchrist.com)

For corrections, suggestions, or to have something included in the bulletins, please contact Ryan or Jennifer Stiltz at 924-0435 or email at [stiltz\\_family@sbcglobal.net](mailto:stiltz_family@sbcglobal.net)

# Welcome

to the

## Church of Christ

meeting at Mack Road

This morning's sermon:  
**The Witness of Success!**  
2 Cron. 24:17-21

This evening's sermon: **First Things First**



### Congregational Meeting Times:

#### Sunday

Morning Bible Study 9:30 am

Worship Service 10:30 am

Evening Service 6:00 pm

#### Wednesday

Morning Bible Study 10:00 am

Evening Bible Study 7:00 pm

## Visitors

*The members here would like to offer a special welcome to our visitors today. Please allow us to shake your hand and talk with you, as we take great joy in getting to know you. Visitor cards are available at the pews for you to provide us with a record of your attendance. We appreciate you taking the time to fill these out.*

### Important dates to remember:

#### January:

Sun. 24th - Elders, Deacons & preachers monthly meeting @4:30pm

Sun. 31st - 5th Sunday of the month friends service.

Sun 31st - Elders, Deacons & preachers Report following abbr. service

#### **Fellowship Opportunities:**

Sun. 24th - Group 1 meets after evening service

Sun. 31st - "Gathering" meeting @ 3:30 pm at building, see Mariel for details

Sun. 2/7 - Potluck/Super Bowl viewing at the Uptegrove's, following morning services



### *Ladies House to House Fellowship*

Lesson Book: "Developing Inner Strength, Living in the Joy of God's Love"

#### **Next class: Today at Anna Swindell's.**

Please prepare lesson 9. Lunch will be provided.

*If you would like to host a class, please let Jennifer know  
February -*

### **Classes**

**Young Adults Class:** Fridays at Caleb's home. See Caleb for details.

**Encouraging Christians:** meets every other Sunday at 3:30 at the building. All ages.

### **New Members:**

Tevin Parker was baptized last Sunday.

Kim Bailey and Natasha Parker and were recently baptized.

The Parker family (Terry, Natasha, Tevin, and Kadeem) has placed membership.

Vernon and daughter Brooklyn Clow have placed membership.

Chris Madina has placed membership

## The Obstacle in our Path

(Author Unknown)

In ancient times, a king had a boulder placed on a roadway. Then he hid himself and watched to see if anyone would remove the huge rock. Some of the king's wealthiest merchants and courtiers came by and simply walked around it.

Many loudly blamed the king for not keeping the roads clear, but none did anything about getting the big stone out of the way. Then a peasant came along carrying a load of vegetables. On approaching the boulder, the peasant laid down his burden and tried to move the stone to the side of the road. After much pushing and straining, he finally succeeded. As the peasant picked up his load of vegetables, he noticed a purse lying in the road where the boulder had been. The purse contained many gold coins and a note from the king indicating that the gold was for the person who removed the boulder from the roadway. The peasant learned what many others never understand. . . ***every obstacle presents an opportunity to improve one's condition.***

### **Birthdays:**

Happy belated birthday to Kadeem, who turned 14 last Thursday