

## GO LONG with Dragonflies!

An outdoor activity about nature's most successful hunter

Dragonflies have been buzzing through the skies for over 300 million years, which is before Dinosaurs ruled the Earth!

They have independently-operating wings, amazing **compound eyes** (HD compared to many other insects), and a small, yet efficient nervous system and brain. These handy **adaptations** make dragonflies an extremely successful hunter.

African lionesses, ferocious breadwinners of their prides, are only successful 30% of the time. Here in Florida, the American Alligator successfully snatches its morning prey about half or 50% of the time, while local resident and retired NFL Hall of Fame wide-receiver Cris Carter had a career catch rate of over 60%. When pursuing a moving target, dragonflies are successful **96%** of the time! Even with their tiny brains, **they can predict** where a fly is going and catch it with ease!



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The Green Darner is a common sight in Florida and the Southeast U.S.

Activity: GO LONG with Dragonflies!

### Materials:

- 1 football, baseball/glove, basketball, volleyball, etc.
- 1 other activity partner
- 1 open yard, field or park
- 1 print-out of this paper (optional)
- 1 pen/pencil (optional)

### Directions:

1. Position both the thrower and catcher next to each other
2. Thrower tosses the ball down the field high above the ground
3. Catcher begins running after the ball is thrown.

**Remember: Be like a dragonfly, go where your “prey” is going, not where it is!**

4. Repeat for 10 throws for each partner and see if you are a
  - Lion (30% or 3/10 catches)
  - Gator (50% or 5/10 catches)
  - NFL Hall-of-Famer (60% or 6/10 catches)
  - Dragonfly (90-100% catches)

Check out Dragonflies' reflexes here: [How do Dragonflies See The World? | BBC](#)

Sources: Stander, P. E. (1992). Cooperative hunting in lions: the role of the individual. *Behavioral ecology and sociobiology*, 29(6), 445-454. <https://doi.org/10.1007/BF00170175>

Nifong, J. C., Nifong, R. L., Silliman, B. R., Lowers, R. H., Guillette Jr, L. J., Ferguson, J. M., ... & Marshall, G. (2014). Animal-borne imaging reveals novel insights into the foraging behaviors and diel activity of a large-bodied apex predator, the American alligator (*Alligator mississippiensis*). *PloS one*, 9(1), e83953. <https://doi.org/10.1371/journal.pone.0083953>

Gillette, G., Palmer, P., Silverman, M., Pullis, K., & Lahman, S. (Eds.). (2006). *The ESPN pro football encyclopedia*. Sterling Publishing Company, Inc. Statistics. Accessed August 2020 from: <https://www.pro-football-reference.com/players/C/CartCr00.htm>

Combes, S. A., Rundle, D. E., Iwasaki, J. M., & Crall, J. D. (2012). Linking biomechanics and ecology through predator-prey interactions: flight performance of dragonflies and their prey. *Journal of Experimental Biology*, 215(6), 903-913. <https://doi.org/10.1242/jeb.059394>

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