

# Creep into the DEEPEND

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# SEAMAIL™

FROM: DEEPEND Science Team  
TO: DEEPEND Virtual Team Leaders  
SUBJECT: Vertical Migration

Hello Virtual Science Team

Have you heard about birds flying south for the summer? Or gray whales going north for the winter? That is called a migration. In fact, to be specific it is a **horizontal migration**. In a horizontal migration, animals travel long distances across or over land or water from one place to another.

In the ocean, there's a special kind of migration called **vertical migration**. This means that animals travel up and down in the water, rather than across the water or land. What's even more amazing is instead of migrating once or twice a year, vertical migration happens EVERY night. Sometimes the animals travel 1,969 feet (600 meters), one way. In the ocean, that is a long way to travel.

Why do animals migrate vertically? The rule of the sea is that anything bigger than you (the predator) wants to eat you (the prey). Many of these predators have very good eyes, so prey hides in deep, dark water during the day. When the sun goes down, the prey moves up to shallower waters to find food. It is a lot harder for their predators to see them at night, so they feed happily until the sun starts to rise again. Then they move back down to the deep dark water again.

This migration is huge! It involves billions of animals including fish, sharks, shrimp, squid, jellies, copepods, and more. It happens every night in all the world's oceans, lakes and even some ponds.

We can see examples of this in our net tows. (SEE VERTICAL MIGRATION PHOTO 1) We collected the first sample during the day in shallow water 0 to 656 feet (0-200 meters). We collected the second sample in the same net, but at night. (SEE VERTICAL MIGRATION PHOTO 2).

Stay tuned for your next Seamail!

*Tammy*

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Creep into the DEEPEND Mission

