

# Ashi-niswi giizisooog (Thirteen Moons)

## Adikomemi Giizis

*Adikomemi Giizis is the whitefish moon. This moon announces the time of the whitefish spawn, an opportunity to gather winter food. Adikomemi Giizis begins its cycle as a new moon on November 6. This moon is also known as Gashkadino giizis, the freezing moon.*



Two FDL Band members clean their fishing net (photo: d. wilsey); Lake herring image: <http://seagrant.wisc.edu/fish/herring.html>

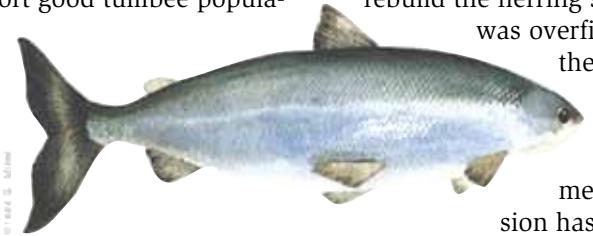
## Odoonibiig (Tullibee)

By Brian Borkholder,  
Fisheries Biologist, FDL RMD

Tullibee (lake herring) have never been as popular with anglers as have such fishes like walleyes, northern pike, or trout, probably in part to their general disinterest in bait and preference for the deepest waters. When the water temperature dips below 50F, tullibeas congregate on shallow reefs and shallow bays for spawning activities. Eggs are broadcast over the rocks and gravel, where they remain until hatching the following spring. When this begins, tullibeas are now vulnerable to gill nets, and are targeted by a small number of avid herring fans.

There are many lakes in the 1854 Ceded Territory that have good populations of tullibee.

Look for deeper lakes, as tullibeas require colder water and high oxygen. Thus, lakes such as Big Lake on the FDL Reservation will not support good tullibee populations, but lakes such as Greenwood (Grand Marais), Hanging Horn (Barnum), Prairie (Cromwell) and Silver Island (Isabella) will. Lake herring make up the bulk of the commercial harvest from Lake Superior along the North Shore, a deep, clear, and cold section of the Lake. During recent years, commercial netters have removed an average of 350,000 pounds of



tullibee from Lake Superior annually. Netting is not allowed on Lake Superior during the spawning season, however, in order to rebuild the herring stock that was overfished in the 1970's. The Resource Management Division has a list of lakes that FDL netters can net. Come in, get your permit, get a list of lakes, and enjoy fresh herring this fall. Netting for tullibee in the 1854 Ceded Territory opened in mid-October, and continues until mid-December.

## Wicipi Oyate

By Annette Lee,  
Saint Cloud State University

Wicipi Oyate is the Lakota word for "Star Nation". The original meaning of this word is "human flesh". Lakota tradition says that we are made from the guts of a dying star. In this case, two completely different avenues reveal the same knowledge: Native culture and Astronomy. The Native Skywatchers Project seeks out and celebrates indigenous people's connection to the stars - one of the few things that connect us all.

Math and science are elegant and powerful languages. They should be available and enjoyed by all. As a society totally dependent on technology, we have the responsibility to understand our world. Whether it is the electrons running computers, the photons carrying our cell signal, or the fossil fuels driving our cars, we need to understand the basics. On a deeper level, we must practice logical thinking. Our leaders and citizens must have plans and carefully consider the consequences to make good choices. There is a

huge need to bring math and science back to the people. As an educator of twenty-one years, this is my goal! Astronomy is the one science that many people still are enamored with. Young and old people come to the planetarium with curiosity and excitement. Through Native Skywatchers we can create enormous change in math and science education and beyond.



**Upcoming Events:** (more info at <http://giizis13.wordpress.com>)

**Thirteen Moons Workshop:** The Winter Night Sky, November 12, 2010

**Thirteen Moons Workshop:** Whitefish Smoking demonstration, TBD

*Thirteen Moons is a monthly production of FDL Resource Management Division and University of Minnesota Extension. Content addresses culture, ecology, and natural resource management. Comments and contributions are welcome and should be directed to FDL RMD at (218) 878-8001 or [giizis13@gmail.com](mailto:giizis13@gmail.com)*