Alaska Climate and Health E-News Raising Awareness and Connecting People in the Interest of Public Health No. 40, October 28, 2010

Toxic Algae Follow-Up – Our reference to the story, *Toxic Algae Killing California Sea Otters (<u>E-News</u> <u>October 21</u>), resulted in requests for more information. According to a State of California factsheet, <i>Microcystis aeruginosa* is a single-celled blue green alga, or cyanobacterium, that occurs naturally in surface waters, and has been showing up more frequently in recent years. *Microcystis* can proliferate to form dense blooms and mats. Many variants of these cyanobacteria produce multiple toxins, including the potent liver toxin, microcystin. When *Microcystis* die, their cells break open, releasing the toxin microcystin into the water. Ingestion of water or algal cells containing microcystin can harm fish, dogs, cats, livestock and humans. The State of California advices people, their pets and livestock to stay out of waters where algae mats are present. <u>Read more</u>

NOAA's Arctic Report Card: Temperatures Rise, Melting Sea Ice - *Associated Press (October 21, 2010).* The new <u>Arctic Report Card</u> "tells a story of widespread, continued and even dramatic effects of a warming Arctic," said Jackie Richter-Menge of the Cold Regions Research and Engineering Laboratory, a U.S. Army Corps of Engineers facility in Hanover, N.H. "This isn't just a climatological effect. It impacts the people that live there," she added. <u>Read Story</u>

Survival and Reproduction of Thousands of Arctic and Alpine Plants Measured *ScienceDaily (October 21, 2010)* - As Earth's climate warms, species are expected to shift their geographical ranges away from the equator or to higher elevations. While scientists have documented such shifts for many plants and animals, the ranges of others seem stable. After studying the growth and survival of tens of thousands of individual plants over six years, researchers have show complex patterns of responses. At the southern edge of their ranges, the plants show negative effects of warmer conditions, with lower survival. But in most years these effects are balanced by plants in the south growing more rapidly. According to Daniel Doak of Duke University, "Up to a point, we may see little effect of warming for many organisms. But past a climatic tipping point, the balance of opposing effects of warming will likely cease, leading to subsequent rapid declines in populations." <u>Read story</u>

Community Voices – Jacqueline Shirley writes: "Last night during the AFN *Quyana Night*, a UAF student, who is a Yupik drummer and singer with the <u>Inu-yupiaq dance group</u>, introduced a song he composed for his dance group. During x-mas break, he really, really wanted to go ice-fishing, but there was no ice. He went home and thought about it, and since he couldn't ice-fish in real life – he pretended in the dance motions he choreographed. I just think this story is interesting, because climate change is even affecting our songs and dance. I just wanted to share this with you."

The Climate and Health E-News is received around the circumpolar north by people who are interested in climate change impacts on health. If you have an observation or an update you would like to include or add to our Alaska <u>Climate Events Map</u>, please send a message to mbrubaker@anthc.org. To join the E-News mailing list, just respond to this message with your contact (e-mail/name/location) information. Click <u>here</u> to find past issues of E-News archived on <u>UAA's Arctic Health website</u>.

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