

EXTENSIONS OF REMARKS

MINNESOTA TEACHER IS SITED AS ENVIRONMENTAL HERO

HON. BRUCE F. VENTO

OF MINNESOTA

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 16, 1996

Mr. VENTO. Mr. Speaker, I rise today to recognize a teacher and a fellow Minnesotan who was recently cited as an environmental hero by the Minnesota Wilderness and Parks Coalition, Ms. Cindy Reinitz. As a science educator for 10 years before serving in the U.S. Congress, I am very pleased to note the outstanding science inquiry education initiative that is being demonstrated by Ms. Reinitz.

Ms. Reinitz teaches at the Minnesota New Country Charter School and has expanded her classroom outside the school's walls, involving her students in an active inquiry project with the goal of solving what persists as an environmental mystery in Minnesota and around the globe. Scientists have documented declines in amphibian populations worldwide, and they have also detected an increase in the number of these animals who have physical deformities. The mystery is what is causing these changes in the amphibian population. Scientists are unsure of the exact cause, but human encroachment on their habitats, chemical pollution, and increased ultraviolet radiation from ozone depletion have been sited as possible suspects.

Minnesota's amphibian population, especially frogs, has been affected, and many groups, including the students in Ms. Reinitz class, have stepped in to help solve the mystery. The students, who initially discovered abnormal development of Leopard frogs in their southwest Minnesota area, have now partnered with the Minnesota Pollution Control Agency and Hamline University's Center for Global and Environmental Education to form the A Thousand Friends of Frogs program. This cooperative effort will, among other things, provide students a way to make substantive contributions to this scientific initiative. The plan is to have the students of A Thousand Friends of Frogs monitor sites where deformed frogs have been found and collect data on their populations. They will also help develop educational programs for use by other students across the State. Eventually, students will combine the data they collected in order to help researchers find the cause and solution to this problem facing Minnesota's frog population.

The enthusiasm and dedication of the students involved in A Thousand Friends of Frogs demonstrates not only their commitment to the environment, but it reflects on the quality and creativity of the students' science teachers. Cindy Reinitz is one of those outstanding educators, expanding the minds of her students and making science more than something to study, but something to explore.

At a time when many questions persist concerning the quality of schools and education programs, it is encouraging to highlight a suc-

cessful program and the positive community response to the concerns of a Minnesota teacher and her students. Teaching younger generations about science is an essential task in a world becoming increasingly reliant on technology and science to remain competitive in the global economy. It is also an important part of passing on an appreciation for the environment and the species that live within it. Educators such as Cindy Reinitz are an integral part of ensuring a quality science and environmental education in our Nation's schools, and I am glad to know that she is making a difference in Minnesota. I want to thank and congratulate Ms. Reinitz for her hard work protecting the environment and educating young Minnesotans. She is not only an environmental hero, but a hero for our young people as well.

Mr. Speaker, I would like to enter the following article into the RECORD regarding the efforts of Ms. Reinitz, her students, and all the scientists and researchers working to find a cause for the mysterious changes in amphibian populations in Minnesota. The article was written by Anne Brataas and printed in the St. Paul Pioneer Press on May 9, 1996.

Consider 55 years of frog history in Minnesota:

One spring night in 1941, Walter Breckenridge—a biologist who specializes in frogs, toads, snakes and salamanders—counted the dead frogs on West Mississippi River Road near his home in Brooklyn Park. His estimate: 12,000 northern leopard frogs per mile on the road surface.

The frogs were killed by cars as they left the Mississippi River, where they spend the winter, and crossed the road to small pools of water to breed. Says Breckenridge: "You'd thought they were fallen leaves, there were so many of them on the road—and I only counted the dead ones. Obviously, some made it across. It was quite a traffic hazard because it was so slippery. But these days, I see very few leopard frogs. Very few."

Last summer students in Cindy Reinitz' science class at the Minnesota New Country Charter School in Le Sueur-Henderson School District had considerably fewer northern leopard frogs to work with—about 400 that they caught with the help of scientists from the Minnesota Pollution Control Agency.

Of those, about 30 to 50 percent were found to be deformed. Some had three legs. Others were missing a leg. Still others had a bony plate jutting out from the leg. Breckenridge says he's never seen such a thing.

These two extreme frog encounters point to a disturbing trend that biologists worldwide are now documenting: Amphibian populations are declining and distressed due to a constellation of factors, including overpopulation by humans that leads to loss of habitat, chemical pollution that poisons amphibians or disrupts normal development, and increased ultraviolet radiation from the destruction of the ozone layer.

In Minnesota, the issue has taken on new urgency since the discovery of the deformed leopard frogs. As a result, a coalition of scientists, college students, Hamline University's Center for Global and Environmental Education in St. Paul and grade school chil-

dren has formed A Thousand Friends of Frogs to help the state's amphibians. Through the Minnesota Legislature—and its Legislative Commission on Minnesota Resources—this coalition has mounted an investigative and educational effort on several fronts. Among them are:

Minnesota Pollution Control Agency—With a \$151,000 grant from the Legislative Commission on Minnesota Resources, MPCA scientists are working with various university researchers to examine tissue samples and egg development and to perform chromosome analysis as a way of determining possible causes of the deformities. "What we're trying to do is see what the deformed frogs have in common," says PCA researcher Judy Helgen. These common factors will then be evaluated in terms of potential causes—from chemicals to parasites—present at the sites during the time the deformities occurred.

University of Minnesota—At the University of Minnesota, ecologist Bill Schmid dissected some of the deformed frogs and X-rayed their bone structure to determine if the deformities were superficial or part of a deeper developmental pattern gone awry. His findings thus far: the deformities appear to be the result of a miscue in the frog's development, probably occurring during limb bud development when it transforms from a tadpole to a legged adult. It seems unlikely that a genetic mutation is at work.

But just what caused the development to go wrong is not known. It could be a number of factors. For example, Schmid says that this type of deformity—known as supernumerary limbs—has been documented at various places around the world at different times in amphibians over the centuries.

Most intriguing to him is a 1990 report by California researchers in which one species of frog (the Pacific tree frog) and one species of salamander (the long-toed salamander) in nearby ponds were found to have extra limbs.

Researchers hypothesized that the cause was a parasite that uses amphibians as an intermediate host. They reasoned that the parasitic cysts may excrete a hormone that disrupts limb development, or pose a physical obstacle to tissues as they develop.

The researchers tested this last idea by experimentally implanting obstacles into frog limbs in the lab. The results: The implants induced the growth of extra limb structures. This suggests that the presence of a parasitic cyst poses mechanical disruption to development—and that this may be a mechanism for the deformities.

Says Schmid: "A lot of things can disrupt normal development. And as this study shows, here's one more thing to look at, since we have a parasite here similar to the one in the California study and we know it affects certain tadpole larvae."

Hamline University—Hamline's Center for Global and Environmental Education brought together researchers from the Minnesota Pollution Control Agency, the Minnesota New Country School and its own departments to form the Thousand Friends of Frogs program. Funded by \$28,000 of the \$151,000 granted the Pollution Control Agency, the Thousand Friends project has three components:

1. This summer, students in the New Country School will monitor sites in the Minnesota River where the deformed frogs were

• This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

Matter set in this typeface indicates words inserted or appended, rather than spoken, by a Member of the House on the floor.

found. They will work with researchers from the Minnesota Pollution Control Agency to try to find the cause of deformities—and what their presence in this population means.

2. The New Country School and Hamline will develop educational programs to be used by children or families throughout the state to assess the health of a local frog population. "This way kids can do hands-on research and learn about science and their own environment," says Tracy Fredin, co-director of Hamline's Center for Global and Environmental Education.

3. In the fall, Hamline will host a week-long environmental education program during which students from throughout the state will compare results to piece together a portrait of the state's frog population.

And it doesn't stop here. A Thousand Friends of Frogs would like to expand into Ten Thousand Friends of Frogs—with more people and more sophisticated science—and has asked the legislative commission for \$500,000 to help them do it. They will testify in favor of their proposal at 2 p.m. May 15 at the State Capitol.

Annual Frog and Toad Survey—Hennepin County Parks biologist John Moriarty is in the third year of conducting a statewide frog and toad survey to determine the strength and health of these populations.

Though it is to soon to make definitive findings, Moriarty hopes that state funding through the proposed Ten Thousand Friends of Frogs program will speed the data collection and analysis, and make the survey a permanent effort.

The money will be used not only to analyze field reports, but to formalize a system of 80 to 100 routes throughout the state that trained volunteers—including backyard nature enthusiasts—will monitor by listening for frog calls at a specific time during the year.

Says Moriarty: "Listening to frogs and learning their calls in your own backyard is a great way to really appreciate the role of wetlands and wooded areas that frogs need. Enlisting the help of people in their backyards not only gives us more data, it will raise awareness about the role of wetlands and woods so that if you see your neighbor dumping oil in a pond or grass clippings, you'll take action."

The message is really pretty simple, he says. If we want frogs, we have to give them the habitat they need. They are more than willing to do their part—and in fact, are trying to now. We have only to listen to them.

HONORING THE ARRINGTON VOLUNTEER FIRE DEPARTMENT

HON. BART GORDON

OF TENNESSEE

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 16, 1996

Mr. GORDON. Mr. Speaker, I am taking this opportunity to applaud the invaluable services provided by the Arrington Volunteer Fire Department. These brave, civic-minded people give freely of their time so that we may all feel safer at night.

Few realize the depth of training and hard work that goes into being a volunteer firefighter. To quote one of my local volunteers, "These firemen must have an overwhelming desire to do for others while expecting nothing in return."

Preparation includes twice-monthly training programs in which they have live drills, study the latest videos featuring the latest in fire-

fighting tactics, as well as attend seminars where they can obtain the knowledge they need to save lives. Within a year of becoming a volunteer firefighter, most attend the Tennessee fire training school in Murfreesboro where they undergo further, intensified training.

When the residents of my district go to bed at night, they know that should disaster strike and their home catch fire, well-trained and qualified volunteer fire departments are ready and willing to give so graciously and generously of themselves. This peace of mind should not be taken for granted.

By selflessly giving of themselves, they ensure a safer future for us all. We owe these volunteer fire departments a debt of gratitude for their service and sacrifice.

RECOGNIZING THE STUDENTS OF ATIA

HON. SAM JOHNSON

OF TEXAS

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 16, 1996

Mr. SAM JOHNSON of Texas. Mr. Speaker, it is my honor to rise before this body and commend a group of American young people who are making a significant, positive impact in our world. The students named below are among many involved in the Advanced Training Institute of America [ATIA], an educational program specializing in the development of strong personal character.

At the invitation of government leaders from New Zealand and Australia, these 92 students and staff traveled to the South Pacific on April 9, 1996. In addition to conducting a seminar with over 1,000 Australian parents, young people, and children, the ATIA students met with government leaders to discuss character-based solutions for the international juvenile.

The Honorable Whetu Tirikatene-Sullivan, a New Zealand Member of Parliament representing the indigenous Maori people, and Jeff Lees of the New Zealand Justice Department received the American youth in order to discuss ways for expanding a previously established program of cooperation between the Justice Department and ATIA young people.

In Melbourne, Australia, the Honorable Ross Smith and other members of Parliament welcomed the ATIA youth with opportunities to talk about developing a work with Australian juvenile offenders. The Honorable Richard Court, Premier of Western Australia, warmly received the American delegation in Perth, where the aforementioned seminar was conducted with over 1,000 in attendance, with special training also being provided by them for 200 young children.

Among the most notable accomplishments of the trip was the drafting and signing of an agreement with the Australian Ministry of Justice. The agreement initiates a work involving families helping families and young people helping young people with the goals of strengthening families and reducing juvenile crime.

The following young men and woman from around the United States deserve special recognition for their own commitment to good character, and for their personal sacrifices to reach out to needy youth and families all over the world:

Starla Adams (OK), Grant Adams (OK), Andrew Anderson (OR), Hamish Anderson (New Zealand), Karith Astle (CA), Angel Atkinson (MO), Jonathan Bain (New Zealand), Simon Bain (New Zealand), Jamie Becker (CO), Heather Bennett (IL), Richard Bramblett (GA), Robert Breese (VA), Christy Briscoe (OK), Cassidy Brock (OR), Weston Brock (OR), Susan Burdulis (WA), Michael Canciglia (WA), Andy Cecil (GA), Tracey Collins (OH), Elizabeth Connelly (CA), James Connelly (CA), Brent Critchfield (CA).

Rebekah Crook (TN), Mandy Dennis (TX), Jason Elliot (WY), Janet Fay (PA), Amy Flora (MI), Benjamin Fryman (OH), Katelyn Gerhardt (CA), William Gothard (IL), Eva Grunewald (TX), Lois Guthrie (WI), Larry Guthrie (WI), Lydia Harmon (MI), Erik Hartstom (CA), Adam Hawkins (AZ), Jennifer Hawley (CA), Nathan Hawley (CA), Titus Heard (OK), Laurie Herbert (New Zealand), Wendy Herdlein (MO), Kay Hill (OK), Thomas Hill (OK).

Joanne Hogg (New Zealand), Nigel Iro (New Zealand), Miriam Johnson (AL), Carisa Joseph (CA), Anne Kirsten (IN), Dennis Kutuzov (Russia), Crystal Ladd (WI), Leah Lentz (WI), Joseph Lyle (GA), DeShea Mabra (MO), James Marsh (KY), Christi Martin (FL), Danielle Martin (New Zealand), Joseph Martin (TX), Richard Mast (FL), Ruth Mirecki (Canada), Lori Newsom (AL), Esther Olson (KS), Matthew Olson (KS), Inga Panapa (New Zealand), Krizia Panapa (New Zealand), Marcia Panapa (New Zealand).

Beth Pendergast (CA), Nathan Pennell (DE), Sara Ramsey (CO), Jonathan Rath (TX), David Rees (KY), Abigail Rose (CA), Kevin Rudesael (TX), David Scott (NY), Courtney Scroggins (TX), Paula Sinclair (New Zealand), Rosie Smith (New Zealand), Rachel Snell (OH), Rebecca Snell (OH).

Melissa Stahl (OH), John Stephens (IL), Jennifer Swecker (WA), Daniel Thompson (CA), Scott Towers (OH), Jennifer Vise (GA), Abby Wakefield (CA), Alyssa Wakefield (CA), Kara Wallace (WA), Jill Walton (PA), Bruce West (Australia), Randal Williams (CA), Russell Williams (VA), Kelly Williamson, (New Zealand).

IN HONOR OF OFFICER GILBERT MANGLONA TAISACAN OF TINIAN

HON. ROBERT A. UNDERWOOD

OF GUAM

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 16, 1996

Mr. UNDERWOOD. Mr. Speaker, a small delegation from a far corner of America, from the Island of Tinian in the Commonwealth of the Northern Mariana Islands has journeyed to Washington to join the President of the United States and thousands of law enforcement officers from around the Nation in a peace officers' memorial service honoring the 174 law enforcement officers killed in the line of duty last year. The CNMI is a good neighbor of Guam and we share a common history as well as cultural traditions.

The 174 names and those of nearly 100 others who died in the past years were added to the National Law Enforcement Officers' Memorial. There are 14,064 names on the Law Enforcement Memorial. Everyone of them, like Gilbert Manglona Taisacan, are heroes who laid down their lives in the service of their communities.

In conjunction with the memorial service, I would like to take a moment today to honor a Tinian peace officer killed in the line of duty last year.