Global Monitoring Division Education

http://www.esrl.noaa.gov/gmd/education/

Kelsey Tayne^{1,2}, Julie Singewald¹ and Ann Thorne¹

- 1: NOAA Earth System Research Laboratory, Global Monitoring Division
- 2: Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder



Global Monitoring Division educational efforts are varied, diverse and designed to reach a broad audience, from K-12 students to the general public. GMD education comes in the form of mentorship, observatory and local outreach, videos, photographs, stories, handouts and lesson plans. GMD education is made possible because of the time and expertise given by the staff and volunteers in GMD, including researchers, educators, students and more.

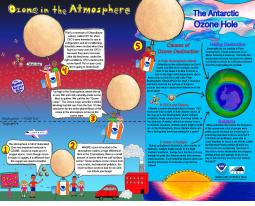


Educational Materials

The Global Monitoring Division offers educational materials online for teachers, kids and the general public in the form of lesson plans, videos, handouts, stories and more. To view available materials, visit the GMD education and outreach webpage (updated and maintained by Kirk Thoning).



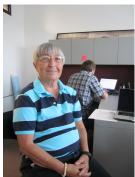




Top: Ozone and Water Vapor Group overview handout for middle school students

Left: Patrick Cullis designing outreach material for the ozone group

Right: Volunteer middle school teacher, Louise Belnay, creating and updating K-12 lessons on methane and the carbon cvcle



Outreach and Education

GMD scientists and educators engage with students and the local community through NOAA Boulder tours, outreach events, public and university lectures and K-12 classroom visits.



GMD mentor Gaby Petron with Kelsey Tayne. Ingrid Mielke-Maday and co-mentor Greg Frost

GMD Mentors

Laboratory at the FRAPPE

Open House Summer 2014

Schools Eighth Grade Career

teaching 2nd graders about

Top Right: Denver Public

Right: Julie Singewald

Fair Fall 2014

the atmosphere

GMD scientists, technicians and engineers are active mentors to students and educators. High school and college-level students work with GMD scientist through the Hollings and Educational Partnership Program or other programs. K-12 teachers with a passion for science education work with GMD scientist through the STAR teacher program.



2014 NOAA/ESRL Summer Students with student coordinator. Ann Thorne

Questions, Comments and Ideas for the Future

What do you envision for the future of GMD education?

How can we more effectively convey GMD science to students and the general public?

What are our educational goals and most important messages as we move forward?

How do we increase climate literacy in our society, and what are our best tools for education and communication?