

Earth & Sky 2008 Progress Report

MONSANTO FUND





Monsanto *Ask the Scientists* Initiative

Earth & Sky Progress Report

January 2008- June 2008

Earth & Sky has accomplished the following activities as they relate to the project's outlined goals and the established *Ask the Scientists Timeline* as laid out in the project proposal. Please see attached *Initiative Timeline* for reference to specific activities.

Goal 1: To increase global science literacy and curiosity about science by encouraging young people from around the world to ask science questions.

Activities Accomplished:

1. Earth & Sky reached out to its network of educators, affiliates, and associations to promote the *Monsanto Ask the Scientists* project. We will work with the Monsanto Fund in the second half of the project to identify schools supported by the Monsanto Fund that may be interested in participating in the project.
2. Earth & Sky gathered its technical staff, producers, and program manager in the beginning of the grant period to devise the best method to collect and record questions.
 - a. Based on previous *Ask the Scientist* project experience and the increased ubiquitousness of Internet as a means of communication abroad, Earth & Sky has successfully used the Internet to gather young people's questions from around the world. We proposed alternate methods of gathering and recording questions within our proposal, and found that using the Internet was the easiest, most accessible and economical method for our participating schools and youth organizations. The process for participating in the *Monsanto Ask the Scientists* initiative is outlined on our website at www.earthsky.org/article/ask-the-scientists which is the dedicated *Monsanto Ask the Scientists* mini-site on our website. This mini-site will advertise the project until September 2008, at which point all the produced *Ask the Scientists* radio podcasts will be compiled and posted to the mini-site. This will enable students, teachers, and the general public to access all the related radio podcasts and content in one place. Please see attached **Addendum One** for a screenshot of the *Monsanto Ask the Scientists* mini-site.
 - b. Earth & Sky worked with John O'Leary, the department head for science at the American School in Japan, to develop the **Teacher Tips** section on our website which is linked within the *Monsanto Ask the Scientist* mini-site. These tips offer other participating teachers tips on how to record their student's questions, and can be found on our website at <http://www.earthsky.org/article/how-to-get-great-audio>, Please see **Addendum Two** for a screenshot of the tips section.

3. Earth & Sky has promoted the project in a variety of media outlets. One major promotion vehicle we have utilized in our website at www.earthsky.org which now welcomes over 500,000 users a month, over 250% more users since submitting our proposal. We are promoting the *Ask the Scientists* initiative in various locations on our website including a button on our homepage at www.earthsky.org which links to the previously mentioned *Monsanto Ask the Scientist* mini-site. Please see attached **Addendum Three** for a screenshot of the homepage. We have also included a link to the *Monsanto Ask the Scientists* mini-site in the **Kids** section of our website at www.earthsky.org/kids/ and our **Earth & Sky Teachers Center** section at www.earthsky.org/teachers/. Please see **Addendum Four** and **Five** for screenshots of our **For Kids** and **Earth & Sky Teachers Center** sections of our website.

We have also promoted the project to organizations abroad, including development agencies, international schools, ESL teacher message boards in addition to our network of over 1700 radio affiliates around the world. This ensures high visibility of the *Monsanto Ask the Scientists* initiative and participation of a wide variety of young people from around the world. Please see attached **Addendum Six**, which is a sample flyer we distributed to promote the project.

Additionally, we directly contacted at least one school in every country Monsanto is located which includes:

Argentina	India	Russia
Australia	Indonesia	Senegal
Austria	Ireland	Singapore
Bangladesh	Italy	Slovakia
Belgium	Japan	South Africa
Brazil	Jordan	Spain
Bulgaria	Kenya	Sri Lanka
Canada	Korea	Sweden
Chile	Malawi	Switzerland
China	Malaysia	Taiwan
Colombia	Mexico	Thailand
Croatia	Netherlands	Turkey
Czech Republic	New Zealand	Uganda
Denmark	Nicaragua	Ukraine
Ecuador	Pakistan	United Kingdom
France	Paraguay	United States
Germany	Peru	Venezuela
Greece	Philippines	Vietnam
Guatemala	Poland	Zimbabwe
Honduras	Portugal	
Hungary	Romania	

4. We have been monitoring the country of origin of our users since the project began through our weekly Web Host Server Statistics reports and web analytics. Between Q1 (January 2008 - March 2008) and Q2 (April 2008 – June 2008), we increased the number

of countries whose users access our website <http://www.earthsky.org> from 142 to 151 countries of the 193 total countries around the world. Earth & Sky welcomes Internet users from nearly every country Monsanto is located. We welcome users from every corner of our world, Yugoslavia to Zimbabwe, Spain to Singapore, Paraguay to Palestine, students, teachers and the general public. These users are able to access science content and are taking part in asking questions about their world throughout the *Monsanto Ask the Scientists* initiative.

Earth & Sky will continue to target countries which it may not be currently reaching and will work to expand our coverage within countries which have only a minimal access to Earth & Sky content through further promotion of the project. This will be a combined effort between Earth & Sky's marketing director, program manager, technical support and executive director through the 2008 grant period.

Earth & Sky has also seen a significant increase in the amount of downloading (i.e. radio shows, podcasts and related science content) that users are conducting from around the globe. Below is a sample of the increase in downloading we measured from selected countries between Q1 and Q2:

Country	Percent increase in downloading of radio podcasts and related science content
Germany	184%
South Korea	167%
Thailand	159%
South Africa	151%
China	148%
Hungary	144%
Canada	137%
Brazil	132%
Taiwan	127%
EU Countries	125%
India	121%

- Earth & Sky has informally thanked teachers who have helped their students participate in the project. In the second half of the project Earth & Sky will have GreenBags, like those that grocery stores are selling as reusable grocery sacks, provided as a gift for the students who submitted questions as part of the *Ask the Scientists* project. Earth & Sky will credit the Monsanto Fund with supporting the project and print both the Monsanto Fund's and logo and tagline on the bag, along with the Earth & Sky logo and tagline, "A clear voice for science", in addition to the title of the project, *Ask the Scientists—Kids asking science question from around the world*. Earth & Sky will consult the Monsanto

Fund on designs for the bag, if requested. Earth & Sky believes reusable bags to be the most sustainable, eco-friendly and practical thank you gift for participants. These reusable bags also provide extended promotion of the project and the work of the Monsanto Fund long after this year's *Ask the Scientists* radio programs have aired.

6. The Earth & Sky producers have been very excited by the complexity and relevance of the questions that they have received from students. Please see a sample of the questions we have received from students below:

Selected science questions Earth & Sky received from young people around the globe	
How hot is the sun?	
Will people make more turbines and use electricity from them?	
As public water supplies become more scarce, what is the newest science for making seawater more available?	
How are science and philosophy related?	
Will everyone use electric cars?	
Is it possible for humans to evolve or mutate to superhumans?	
If the fundamental particles bosons and pions form everything in our universe, what are they made of and how do they form?	
Why does the sky change color when the sun sets?	
Will we discover more planets in the solar system?	

The following is a sample of the questions selected to be answered in a radio podcast and aired on our network of over 1700 global radio affiliates.

Student's Name	Student's School and Location	Student's Question
Nina Amatulli	American School in Japan, Tokyo, Japan	Why is Earth the only planet with living things?
Ziran	UniCollege Bonaire, Bonaire, Netherlands Antilles	Why do people yawn?
Tony	Vientiane International School, Vientiane, Lao PDR	Is it possible for humans to live for 200 years?

Pamela Zamora	Secundaria Ovalle Monday, Mexico City, Mexico	Why do we use only a small percentage of our brains?
Jung Bin	International School Tianjin, Tianjin, China	Will there be more pollution in the future? Will there be flying cars?

Earth & Sky has also received a number of pictures of students participating in the *Monsanto Ask the Scientists* initiative. See **Addendum Seven** for a sample of the photos received along with the related release forms. All collected photos and release forms will be compiled and submitted with Earth & Sky's final project report.

7. The Earth & Sky producers are in the process of interviewing scientists to answer the selected questions submitted by young people and will continue through the second half of the 2008 grant period. The Earth & Sky producers have interviewed scientists from a variety of institutions in order to answer the young people's questions, including The National Institutes of Health and NASA's Goddard Space Flight Center. Earth & Sky producers are working to interview scientists from a variety of backgrounds, countries and expertise, to answer young people's questions, while also sending a message that scientists are everywhere, and that anyone can work to become scientists no matter where one lives. A complete list of the scientists interviewed for the *Monsanto Ask the Scientists* radio podcasts can be provided in the final report if desired by the Monsanto Fund.
8. Earth & Sky has released the first two *Monsanto Ask the Scientists* radio podcasts to our more than 1700 radio affiliates and additional media outlets. The podcasts generated a combined 24 million impressions around the world, an increase of more than 8 million impressions than was initially anticipated when the proposal was drafted. Earth & Sky's science distribution network, which combines a number of media platforms, now generates more than 12 million impressions¹ for every program that is released through our network. We have included audio samples of the first two *Monsanto Ask the Scientists* radio podcasts below as embedded files, and as email attachments to this report. **Addendums Eight** and **Nine** are screenshots of the two *Monsanto Ask the Scientists* radio podcasts which have been posted on our website.

¹ Earth & Sky's Spring 2008 U.S. Audience Analysis conducted by Act 1 Systems, Inc., a certified contractor of Abratron, Inc.

First *Monsanto Ask the Scientists* radio podcast (click logo to play)



Second *Monsanto Ask the Scientists* radio podcast (click logo to play)



The rest of the *Monsanto Ask the Scientist* radio podcasts will be tentatively released on the following dates through the end of the 2008 grant period:

- July 7, 2008
- July 14, 2008
- August 5, 2008
- September 8, 2008
- September 15, 2008
- September 22, 2008
- October 27, 2008
- November 17, 2008
- December 8, 2008
- December 15, 2008

A compact disc containing all 12 of the *Monsanto Ask the Scientists* radio podcasts will be provided to the Monsanto Fund with Earth & Sky's final project report.

9. Earth & Sky has posted the first two programs to its website, and has included transcripts of the podcasts, the ability for users to stream or download the *Ask the Scientists* radio podcasts, along with information about the scientists and links to podcasts on related content. The first radio podcast produced and posted to our website answered Pamela Zamora's question, "Why do humans only use only part of the brain?" can be viewed and streamed from our website at www.earthsky.org/radioshows/52559/why-do-humans-use-only-part-of-the-brain. The second *Ask the Scientists* radio podcast which answered Jung Bin's question, "Will there be more pollution in the future?" can be viewed and streamed from our website at www.earthsky.org/radioshows/52592/will-there-be-more-pollution-in-the-future. Earth & Sky will continue to post the *Monsanto Ask the Scientists* radio programs to its website as they are produced, reviewed and released throughout the 2008 grant period. The Monsanto Fund is welcome to repurpose these audio podcasts on its website.

Goal 2: To increase global accessibility to informal science education by bringing Earth & Sky's award-winning science content to a greater worldwide audience.

Activities accomplished:

1. Earth & Sky's marketing director has worked to identify key radio markets to solicit new affiliates in order to increase student's, educator's, and the general public's access to quality science content and extend the opportunity for young people to participate in the *Monsanto Ask the Scientists* project. The number of Earth & Sky radio affiliates has

increased by more than 100 affiliates since the project started, ensuring that the *Monsanto Ask the Scientist* radio programs have the widest distribution possible. Of key interest, Earth & Sky nearly doubled its number of air times on Radio America, which reaches 167 of the 193 countries around the world, since this project began. The increase in air times of Earth & Sky radio programs on Radio America has been helpful in raising awareness about the Monsanto Ask the Scientists project around the globe.

2. Earth & Sky has exchanged links with a variety of its affiliate radio stations, educational partners and other media organizations. Earth & Sky will augment its established initiative timeline by continuing to promote the project through the second part of the 2008 grant period. This ensures continued and increased awareness of the *Monsanto Ask the Scientists* project, and the participation and engagement of young people asking science questions from around the world.

Goal 3: To provide young people from around the world with a searchable web-based resource for them to ask science questions, while also encouraging young people to use the Internet as a tool for learning.

Activities accomplished:

1. Earth & Sky has been working with its web developer, Lucid Crew, and its technical support staff to create and launch the *Ask the Scientist* searchable database. This database will be launched in the early second half of the grant period. When launched, the database will be linked to related *Ask the Scientists* sections of our website at www.earthsky.org and provide young people and general public from around the world an opportunity to have some of their science questions answered.
2. Maintenance and augmentation of the database is in process and will continue to be carried out in the second half of the project period.
3. Earth & Sky's web developer, Lucid Crew, and its technical support staff are currently working to develop a mechanism that will incorporate the *Monsanto Ask the Scientist* podcasts into the existing database as the *Ask the Scientist* radio podcasts are released. All *Monsanto Ask the Scientist* podcasts will be incorporated into this database by the end of the 2008 grant period.

Please see attached the **Financial Expenditure Project Report** for January 2008-June 2008.

Earth & Sky is grateful for the Monsanto Fund's support of the *Ask the Scientists* initiative. This initiative continues to allow Earth & Sky the great opportunity to reach out to young people around the world and answer their science questions. The *Monsanto Ask the Scientists* initiative not only contributes to Earth & Sky's mission as *a clear voice for science*, but more importantly the project contributes to the overall increase of available STEM education for young people and their access and interest in quality science education and related learning tools. Earth & Sky has had a huge response from young people about the project and foresees expanding the project in 2009. Earth & Sky would especially like to incorporate our Spanish language sister, Cielo y

Tierra, in order to answer science questions of young people in Spanish, for which there have been numerous requests.

We look forward to Ms. Patterson's visit later this year and continuing our work to answer young people's science questions throughout 2008. If you have any questions please do not hesitate to contact Ryan Britton, Earth & Sky's Executive Director, at (512) 477-4441 or by email at rbritton@earthsky.org or Hope Roobol, Earth & Sky's Sponsorship and Partnership Manager, at hroobol@earthsky.org.

Earth & Sky Initiative Timeline

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Ask the Scientists Initiative Timeline

	ACTIVITES	2008											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Goal 1	1. Work with Monsanto Fund to contact previously supported organizations working with youth to participate in the initiative												
	2. Develop and post submission methods for science questions, and establish submission mechanisms (Internet telephone, submission through the website, etc.)												
	3. Promote initiative (website, among international organizations, schools, etc.)												
	4. Monitor international users of earthsky.org through Google Analytics and adjust promotion of initiative accordingly												
	5. Question submitters will be thanked for their participation in the initiative through email, mail, or by phone, and directed to other science resources												
	6. Producers will monitor submission and begin identifying key questions to be answered by scientists												
	7. Producers will conduct interviews with scientists to answer young people's questions and produce them into 12 radio shows												
	8. Interviewed scientists and internal review committee will review shows before distribution												
	9. Distribute the <i>Ask the Scientist</i> radio shows through over 1600 radio station outlets around the world, resulting in each show being heard over 8.1 million times												
	10. Shows will be upload to Earth & Sky's website, along with the show's transcript, the ability to stream and download the show, a link to the <i>Ask the Scientists</i> searchable database, and other science links along with credit to the Monsanto Fund												
Goal 2	1. Affiliate Marketing Director will identify key radio markets to solicit new affiliates to increase accessibility of quality science education content abroad												
	2. Exchange links with international organizations, schools and non-governmental organizations abroad to increase awareness and participation in the <i>Monsanto's Ask the Scientists</i> initiative												
Goal 3	1. Work with web developer to create and launch the <i>Ask the Scientists</i> searchable database												
	2. Maintain and augment the database to ensure timeliness, adding relevant links to other science resource especially for young people, along with links to <i>Earth & Sky's Kids</i> section, developed in partnership with Project Learning Tree												
	3. Make <i>Ask the Scientists</i> shows available through keyword search ensuring an enduring impact of the shows messages, encouraging young people from around the world to question science in the world around them												

Earth & Sky

2008 Project Financial Expenditures Report

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Earth & Sky Project Financial Expenditure Report
(6 months from Jan-June 2008)
Monsanto Ask the Scientists

PRODUCTION EXPENSES	
PERSONNEL EXPENSE	
Executive Producer	\$6,559
(Oversight and management of project content)	.
Executive Director/Producer	\$6,018
(Oversight and management of project deliverables)	
Producer/Host	\$4,319
(Project voice work)	
Staff Producers (3)	\$9,309
(Project writing and production)	
Web/Radio Production Manager	\$2,739
(Management and implementation of all online deliverables)	
Web/Radio Production Assistants (2)	\$4,172
(Implementation and monitoring of all online deliverables)	
Researchers/Freelancers	\$4,000
Computer Programmer/Designer	\$7,500
(Design and implementation of project online components)	
BENEFITS & TAXES	\$5,499
PRODUCTION TRAVEL	\$1,119
(To science conferences and meetings)	
COMPUTER PURCHASES	\$2,006
PRODUCTION SUBCONTRACTS	\$3,868
(Freelancers/international phone/software/computer consulting)	
TOTAL PRODUCTION EXPENSE	\$57,108
DISTRIBUTION & EVALUATION EXPENSES	
PERSONNEL EXPENSE	
Executive Producer	\$2,769
(Management of distribution and network upkeep)	
Affiliate Relations Specialists/Marketing Director (3)	\$9,259
(Upkeep and growth of the Earth & Sky network)	
Projects/Public Relations Manager	\$4,237
BENEFITS & TAXES	\$1,982
TRAVEL	\$1,666
(Industry conferences)	
ADVERTISING	\$926
EVALUATION	\$3,287
(project deliverables and general Earth & Sky impact)	
PUBLICATION / CONTENT DISTRIBUTION	\$3,289
DISTRIBUTION SUBCONTRACTS	\$3,000
(Gathering of network audience numbers using Arbitron data where available)	
TOTAL DISTRIBUTION COSTS	\$30,415
ADMINISTRATION AND OPERATIONAL EXPENSES	
PERSONNEL EXPENSE	
Assistant Director	\$4,389
(Directing of personnel office and administrating)	

Auditor	\$1,620
(990 and A-133 audits)	
Grant Writers/Project Manager (2)	\$8,043
(Implementation of current and future projects)	
BENEFITS & TAXES	\$1,217
GENERAL OVERHEAD	\$12,030
(Office expense and indirect costs)	
COMPUTER/TECHNICAL ASSISTANCE	\$5,170
(Programming and upkeep and distribution of online presence)	
TOTAL ADMIN. & OPERATIONAL EXPENSE	\$32,469
TOTAL PROJECT EXPENSES TO DATE	\$119,992

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Earth & Sky 2008 Progress Report **Addendum One**



Ask the Scientists

Subscribe

Animals

Bizarre

Body & Mind

Climate

Earth

Human World

Innovation

Oceans

Plants

Space

Photos



Earth & Sky – a clear voice for science heard around the world – is seeking questions from young people about the world of the 21st century. **The 12 most thoughtful questions in 2008 will be answered by professional scientists and broadcast on radio stations around the world!** Selected organizations will also be featured at [EarthSky Kids](#).

Four easy steps to participating:

1. Have your students write down their science questions. We're especially seeking questions about sustainability – fresh water, sources of energy, human health, the food we eat, animals and plants, transportation, cities of the future, and so on.
2. Email those typed questions to [askus\[at\]earthsky.org](mailto:askus[at]earthsky.org). EarthSky producers will choose the top 50 questions to be considered for recording.
3. Be thinking of places in your community where you could record science questions (at a local radio station, a university, even at your school). For tips from a teacher on recording great audio, click [here](#).
4. If at least one question from your school is selected, we will discuss with you the best way to send us your audio files of the selected question(s).

Deadline for submitting questions for this year: August 31, 2008.

Earth & Sky will choose 12 audio files from all submitted audio files. Earth & Sky will incorporate the 12 questions into radio broadcasts. Each broadcast will be heard 12 million times around the world on our [global network](#). Unfortunately, Earth & Sky cannot provide answers to every science question submitted. Sending an email question, audio file or picture to Earth & Sky, constitutes your granting of permission for Earth & Sky to use that question and the child's voice online and on the radio.



The Ask the Scientists project is made possible by a generous grant from the [Monsanto Fund](#), bridging the gap between the needs of people around the world and their resources.

Mars in conjunction with Regulus on June 30
Lead scientist at Shell speaks on global warming in EarthSky podcast
Do some animals grow throughout their lives?
How do Monarch butterflies migrate?
Can bees see colors we can't?

For up to the minute Science News from around the world, visit [Science News Headlines](#).

Advertise on Earthsky.org [Learn More](#)

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Earth & Sky 2008 Progress Report Addendum Two



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Earth

Human World

Innovation

Oceans

Plants

Space

Photos

To Receive our
Earth & Sky Newsletters
SUBSCRIBE!
Let your
voice be heard
In our occasional
online survey



How to record great science questions from kids



Want to get great audio for your kids' science questions?

Here are some tips compiled by John O'Leary – a teacher at the American School in Japan – and EarthSky producers.

O'Leary says the process of downloading the necessary software and recording a question takes about 20 minutes from start to end.

He recommends a USB microphone & headphone, connected to a computer.

A great program for audio recording and editing on a computer is [Audacity](#). You can download the latest version. It's free! To download, go [here](#)

Three easy steps to recording your kids:

1. First, let your kids get used to being in front of the microphone. Ask them a question or two about themselves to start. **Be careful that the kids are not sitting too close to the microphone. This causes distortion. A couple of inches away is best.**
2. When you're ready to record, be sure to have your kids say their names, and the name of their school.
3. Let them ask their questions. Remember, EarthSky can edit the questions, so don't worry if the kids ramble a bit. We're looking for a nice, natural sound.

Final hint if you are using Audacity and want to export your file as an MP3: download one plug-in for Audacity to enable the selected section of the music file to "export as MP3." You will know you need to do this if you try to export your files as an mp3, and Audacity asks you for lame_enc.dll.

To get it online, type in LAME MP3 encoder into Google select the download. Download the entire folder into the Audacity Plug in folder.

Now when you select save as an mp3 file, you can tell it that the lame_enc.dll file is in the Audacity plug in folder.

Having problems? Email us at [askus\[at\]earthsky.org](mailto:askus[at]earthsky.org). EarthSky producers are standing by to help you!



The Ask the Scientists project is made possible by a generous grant from the [Monsanto Fund](#), bridging the gap between the needs of people around the world and their resources.

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Earth & Sky 2008 Progress Report Addendum Three

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In our occasional online survey

FOR KIDS

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Does being a dog mean never having to say you're sorry? Not really, according to biologist Marc Bekoff of the University of Colorado. Bekoff talked to EarthSky about how and why dogs learn to play fair.

[Podcast Feed](#) [More Radio Podcasts ...](#)

» **EarthSky's meteor guide for 2008**

Here's what you need to know to become as proficient as the experts at watching meteors. [more...](#)

» Smallest planet found orbiting smallest star

» Where is the Milky Way?

» Earth swings between sun and Jupiter in early July

» Why is Earth the only planet with living things?

» Will India's energy future be sustainable?

» Experts gather to discuss global catastrophic risks

EarthSkyBlogs



Short-lived Lizard

Here's a good argument against intelligent design: life is just too weird and random to be the product of an overarching, ordered plan. Take, [...]

Posted by [Jeremy Shere](#) July 11, 2008 (0)



Clean energy: wind farms for the wind belt

Every day is another adventure in cyberspace, and today I encountered a lecture by T. Boone Pickens on the possibilities of solving at least some [...]

Posted by [Beverly Spicer](#) July 11, 2008 (0)



Redwood of the reef is longest-lived animal

A new study estimates that one species of sponge can live to be 2,300 years old -- that's about the same as the oldest known [...]

Posted by [Dan Kulpinski](#) July 9, 2008 (0)



Where are you?

In this day of Global Positioning Systems, computers and the Internet, it has never been so easy to know your exact position on the planet, [...]

Posted by [Larry Sessions](#) June 25, 2008 (4)

- On July 10 and 11, Mars and Saturn close! (4) [comments](#)
- Experts gather to discuss global catastrophic risks (9) [comments](#)
- Astronomers to begin dark energy search in 2010 (5) [comments](#)
- Jupiter -- nearly opposite sun -- overhead at midnight (5) [comments](#)
- Young moon, planets, star on July 5 (10) [comments](#)
- See Saturn, Mars, Regulus in late June 2008 (3) [comments](#)
- Hinode satellite views August 1 solar eclipse (2) [comments](#)
- Will your car use fuel made from natural gas? (11) [comments](#)
- Dark matter responsible for galactic violence (6) [comments](#)
- Mars in conjunction with Regulus on June 30 (3) [comments](#)



« Chart Details »

Fri, Jul 11
Will the moon be north, south, east or west?

Sat, Jul 12
Big Dipper points to Polaris, aids in finding Thuban

Sun, Jul 13
Moon approaches Antares on July 13

We don't know yet what will happen, but one speculation is that global warming is going to push the ocean towards new directions.

- Jorge Sarmiento, Princeton University



Science News Headlines

All your science news in one place.



Ask the Scientists

Children asking questions about their world.



Cielo y Tierra

Serie de radio que se escucha en todo Estados Unidos. Comunidad en la Web donde cuenta tu opinión.



Chronicles of a Science Experiment

Don't miss a single episode. Coming Soon



International Polar Year

Celebrating and exploring Earth's poles.

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Earth & Sky 2008 Progress Report Addendum Four

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EarthSky

A CLEAR VOICE FOR SCIENCE

KIDS

SCIENCE NEWS

The buzz on mosquito bites

 Jul 10, 2008
 Bzzzzz. Slap! ITCH. Scratch. Sound familiar?
[Discuss](#) | [More »](#)

Queen bees and wanna-bees?

 Jun 29, 2008
 How do bees replace their queens?
[Discuss](#) | [More »](#)

Can birds use both of their eyes at the same time?

 Jun 06, 2008
 It seems like a crow can use only one eye at a time ...
[Discuss](#) | [More »](#)

Like a moth to a flame

 Jun 03, 2008
 Why are moths drawn to light?
[Discuss](#) | [More »](#)

Why does your stomach growl when you're hungry?

 May 28, 2008
 Just thinking about food can get your digestive organs going
[Discuss](#) | [More »](#)

PODCASTS

Smallest planet found orbiting smallest star

 Jul 10, 2008
 Tiny stars called brown dwarfs are too small to sustain the nuclear
[Discuss](#) | [Read More »](#)

Why is Earth the only planet with living things?

 Jul 07, 2008
 Nina Amatulli, in the second grade at The American School in
[Discuss](#) | [Read More »](#)

Climate change shrinking water in western U.S.

 Jun 28, 2008
 A 2008 study shows that Earth's changing climate has caused
 8 comments | [Read More »](#)

Why are some butterfly populations shrinking?

 Jun 27, 2008
 Experts say they are seeing rapid declines in the number of butterfly
[Discuss](#) | [Read More »](#)

Ark underway. Amphibians only need apply.

 Jun 26, 2008
 The Amphibian Ark is a global effort to collect amphibians in zoos,
[Discuss](#) | [Read More »](#)

TONIGHT'S SKY

South, Evening



Fri, Jul 11
 Will the moon be north, south, east or west?
Sat, Jul 12
 Big Dipper points to Polaris, aids in finding Thuban
Sun, Jul 13
 Moon approaches Antares on July 13

[Zubeneschamali](#)
[Zubenelgenubi](#)
[Moon](#)
[Chart Details »](#)



ASK THE SCIENTISTS

Children asking questions about their world



KATHY AND ED PRESENT



YOUNG PRODUCERS CONTEST WINNERS



Earth & Sky TEACHERS CENTER

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Earth & Sky 2008 Progress Report Addendum Five



Cities ally with nature to solve problems

Posted Nov 13, 2007 in Environmental Impact, Human World, Land Use, Sustainability

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Cities ally with nature to solve problems

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Activity 12: Invasive Species

Exploring Environmental Issues: Places We Live (9-12)

Activity 5: Green Space

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PROJECT LEARNING TREE® is an award winning Environmental Education program of the American Forest Foundation.



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Satellite tracking shows dust suppresses hurricanes

Posted Aug 15, 2007 in Climate and Weather, Deserts, Earth Monitoring

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Satellites can track Saharan dust storms across the Atlantic ocean. NOAA's Jason Dunion analyzed over 20 years of images showing atmospheric dust blowing off of the Sahara desert, and compared that to hurricane and storm activity.

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PreK-8 Guide

Activity 86: Our Changing World

Exploring Environmental Issues: Focus on Risk (9-12)

Activity 7: Decision Making: Ecological Risk, Wildfires, and Natural Hazards

U.S. future population uncertain, due to migration

Posted Aug 15, 2007 in Human World, Migration

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Demographers agree that U.S. population is growing and will continue to grow. But by how much? Projections differ. The reason for the uncertainty, said Joel Coel, is immigration ...

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Related PLT Activities

PreK-8 Guide

Activity 86: Our Changing World

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Earth & Sky 2008 Progress Report Addendum Six



Ask the Scientists

Children Asking About Their World

Earth & Sky a clear voice for science heard around the world is seeking questions from young people about the world of the 21st century.

The 12 most thoughtful questions in 2008 will be answered by professional scientists and broadcast on radio stations around the world! Selected organizations will also be featured at [EarthSky Kids](#).

Four easy steps to participating:

1. Have your students write down their science questions. We're especially seeking questions about sustainability, fresh water, sources of energy, human health, the food we eat, animals and plants, transportation, cities of the future, and so on.
2. Email those typed questions to askus@earthsky.org. EarthSky producers will choose the top 50 questions to be considered for recording.
3. Be thinking of places in your community where you could record science questions (at a local radio station, a university, even at your school). For tips from a teacher on recording great audio, [click here](#).
4. If at least one question from your school is selected, we will discuss with you the best way to send us your audio files of the selected question(s).

Deadline for submitting questions for this year: June 20, 2008.

Earth & Sky will choose 12 audio files from all submitted audio files. Earth & Sky will incorporate the 12 questions into radio broadcasts. Each broadcast will be heard 12 million times around the world on our [global network](#). Unfortunately, Earth & Sky cannot provide answers to every science question submitted. Sending an email question, audio file or picture to Earth & Sky, constitutes your granting of permission for Earth & Sky to use that question and the child's voice online and on the radio.



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The Ask the Scientists project is made possible by a generous grant from the Monsanto Fund, bridging the gap between the needs of people around the world and their resources.

The EarthSky Promise

We take seriously our responsibility for bringing the ideas, strategies, and research results of scientists to people around the world, with the goal of illuminating pathways to a hopeful and sustainable future.

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Earth & Sky 2008 Progress Report Addendum Seven




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Earth & Sky 2008 Progress Report Addendum Seven

Media Information and Audio/Photo Release

I, Rebecca Gessert parent/legal guardian of Keeli Johnson
hereby grant permission to Earth & Sky, Inc., its agents and employees, and to
Monsanto Fund, its agents and employees, to use audio of my child's voice
and/or photographs taken of my child during the *Ask the Scientists* project
activities and to use any such audio/photos with the media, including television,
radio and print media and/or in Fund publications without compensation.


Signature of Parent

Rebecca Gessert
Print Parent Name

Keeli Johnson
Print Child's Name

May 4, 2008
Date

Media Information and Audio/Photo Release

I, Rosanne Amatulli parent/legal guardian of Nina Amatulli hereby grant permission to Earth & Sky, Inc., its agents and employees, and to Monsanto Fund, its agents and employees, to use audio of my child's voice and/or photographs taken of my child during the *Ask the Scientists* project activities and to use any such audio/photos with the media, including television, radio and print media and/or in Fund publications without compensation.

Rosanne Amatulli
Signature of Parent

Rosanne Amatulli
Print Parent Name

Nina Amatulli
Print Child's Name

5/2/08
Date

Media Information and Audio/Photo Release

I, Manami Keuning parent/legal guardian of Anika
hereby grant permission to Earth & Sky, Inc., its agents and employees, and to
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and/or photographs taken of my child during the *Ask the Scientists* project
activities and to use any such audio/photos with the media, including television,
radio and print media and/or in Fund publications without compensation.

Manami S. Keuning Manami Keuning
Signature of Parent Print Parent Name
Anika Keuning May 5, 2008
Print Child's Name Date

Media Information and Audio/Photo Release

I, Hudwina Henderson parent/legal guardian of Mary-Jo
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and/or photographs taken of my child during the *Ask the Scientists* project
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Hudwina Henderson
Signature of Parent

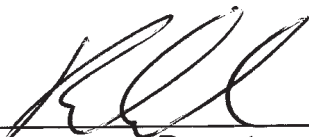
Hudwina Henderson
Print Parent Name

Mary-Jo Henderson
Print Child's Name

16-5-2008
Date

Media Information and Audio/Photo Release

I, Roy CHIN-ON parent/legal guardian of ROCCA CHIN-ON hereby grant permission to Earth & Sky, Inc., its agents and employees, and to Monsanto Fund, its agents and employees, to use audio of my child's voice and/or photographs taken of my child during the *Ask the Scientists* project activities and to use any such audio/photos with the media, including television, radio and print media and/or in Fund publications without compensation.



Signature of Parent

Roy CHIN-ON

Print Parent Name

ROCCA CHIN-ON


Print Child's Name

15 MEI 2008

Date

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I, Roy CHIN-ON parent/legal guardian of ZIRAN CHIN-ON hereby grant permission to Earth & Sky, Inc., its agents and employees, and to Monsanto Fund, its agents and employees, to use audio of my child's voice and/or photographs taken of my child during the *Ask the Scientists* project activities and to use any such audio/photos with the media, including television, radio and print media and/or in Fund publications without compensation.



Signature of Parent

Roy CHIN-ON

Print Parent Name

ZIRAN CHIN-ON

Print Child's Name

15 MEI 2008

Date

Media Information and Audio ~~Audio~~ Release

I, Inge v.d. Veen parent/legal guardian of Timo van der Veen
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activities and to use any such audio, ~~audio~~ with the media, including television,
radio and print media and/or in Fund publications without compensation.



Signature of Parent

INGE VAN DER VEEH

Print Parent Name

Timo van der Veen

Print Child's Name

16 mei 2008

Date

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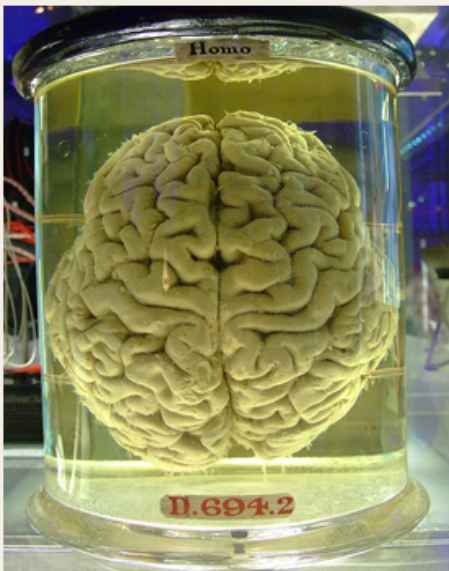
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Why do humans use only part of the brain?

Program #5597 of the Earth & Sky Radio Series
with hosts **DEBORAH BYRD, JOEL BLOCK,**
LINDSAY PATTERSON and JORGE SALAZAR.

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(Credit: [Gaetan Lee](#). Some rights reserved.)

Today ... young people from around the world ask the scientists.

Here's a question from Mexico – about how much of the human brain actually gets used.

Pamela Zamora: Why do we use such a small percentage of our brains?

That was Pamela Zamora from Secundaria Ovalle Monday. And with an answer ...

Jay Giedd: Thanks, Pamela. It's a very good question because it allows me to address one of the most common misunderstandings about our brains. I'm Dr. Jay Giedd, chief of brain imaging at the Child Psychiatry Branch at the National Institute of Mental Health. The truth is that we use 100% of our brains, even when we're sleeping. Maybe the idea behind this notion that we only use a small percent of our brains – is that we all have the potential to learn more and accomplish more. And I think that's basically true. But it's not because a large part of our brain is not being used.

Giedd said even simple tasks, like pushing a button, involve almost all the parts of the brain.

Jay Giedd: It's never a matter of one part of the brain being active and the others being inactive, or asleep. It's always a matter of some more active than others, depending on what tasks we're doing.

Our thanks to Pamela Zamora and Dr. Jay Giedd.



Our thanks to the [Monsanto Fund](#), bridging the gap between people and their resources.

Related:

[What causes 'brain freeze'?](#)

Our thanks to:

Dr. Jay Giedd

Chief of Brain Imaging

National Institute of Mental Health



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Earth & Sky 2008 Progress Report Addendum Nine

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Will there be more pollution in the future?

Program #5607 of the Earth & Sky Radio Series
with hosts **DEBORAH BYRD**, **JOEL BLOCK**,
LINDSAY PATTERSON and **JORGE SALAZAR**.

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Credit: **Joseph S.** (Some rights reserved.)

Jung Bin at the International School of Tianjin in northern China asks the scientists about our atmosphere.

Jung Bin: Will there be more pollution in the future?

To help answer this question, EarthSky went to atmospheric scientist Ralph Kahn at [NASA's Goddard Space Flight Center](#) in Greenbelt, Maryland.

Ralph Kahn: That's a very good question. And it depends a lot on the choices that we make.

Kahn said that in developing nations like China, more pollution can come from an increasing demand for energy. But people can create better fuels that make less pollution.

Ralph Kahn: Particles in the atmosphere live for about a week before they're rained out, typically. So if we have less sulfur-containing fuels that we burn, then sulfate particles — the particles that end up in fossil fuels when you burn fossil fuels — within a very short period of time, they'll be removed from the system..

So, Jung Bin, the answer is that people can work to reduce pollution.

Ralph Kahn: The adage about 'reduce, reuse, recycle' captures a lot of what we can do as individuals. I certainly am hopeful that we'll take the steps needed to reduce pollution in our atmosphere and make the planet a better place for us to live.



Our thanks to the [Monsanto Fund](#), bridging the gap between people and their resources.

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Our thanks to:
Ralph Kahn
NASA Goddard Space Flight Center
Greenbelt, MD

Written by **LINDSAY PATTERSON**

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