Shorebird Sister Schools Program
E-mail Listserv

Teacher

This activity is made possible by the Shorebird Sister Schools Program, Web site, and listserv.

Description
Students will share their observations from their wetland field trip on the Shorebird Sister Schools listserv which goes out to nearly 800 people along the shorebird flyways around the world.

Objectives
Students will be able to:
1. Write messages to other students
2. Ask biologists questions
3. Learn from other students and biologists about shorebird s and wetland habitats around the world
4. Learn how to use an e-mail listserv

Time Required
On-going although most active during fall and spring migration

Subjects
Language arts, Technology, Science

Skills
Typing, Communication through technology, Writing

Materials
Computer: monitor, keyboard, mouse, hardware computer, IBM clone or Apple/Macintosh with modem. Modem can be internal or external. The faster the modem the better. A 28.8 speed modem or faster is recommended. Minimum computer speed of a '486' (preferably higher or the kids will lose interest because the pictures draw too slowly).

Internet Browser package, of which there are many types: Netscape, SPRY, Mosaic, Microsoft Internet Explorer, etc. Some are free to schools. There are also several on the market. Computer stores can also help you get the best one for your students.

Dedicated phone line for your modem. If your school has a sophisticated phone system, you will need one phone line to the outside that is not part of that system. Perhaps you have a computer lab with just that kind of setup.

Background Information
The Shorebird Sister Schools program is a technology based education program. It has three components— the web site, E-mail listserv, and K-12 curriculum. This activity is designed to help you and your students use the E-mail listerv. The E-mail listserv has numerous possibilities including asking biologists questions, looking for penpals in other states or countries along your flyway, learning what other students are observing, learning what scientists are doing for shorebird conservation, and sharing what your class has learned and observed on your field trips. The E-mail listserv has nearly 800 subscribers throughout the United States and in numerous countries including Portugal, Australia, Russia, Japan, Argentina, and many more. It's a wonderful way to feel connected to the big picture of shorebird and wetland conservation. Students learn that their wetland is truly just one part of the numerous habitats shorebirds need along their long migration journey.

Procedure
1. **Log onto the Shorebird Sister Schools Program Web Site.**
The Shorebird Sister Schools Program Web site is: http://sssp.fws.gov

To get to the site, where you can read what others have written on the E-mail listserv or reported about shorebirds, you will have to start your Web Browser. Type in the above Web site (the entire line) wherever it asks you for a location or address. Then hit return/ enter and the Shorebird Sister Schools Program Web site will appear on your screen. Click on the web link "Where Are They Today?" and you will see the past messages that have been sent to the E-mail listserv.

To *navigate* around the various pages, you will need to click with your mouse on the colored underlined text (*hypertext links*). This will take you to another page. There are two methods to return to the previous page: 1) click with your mouse on the 'back' button somewhere on the page or 2) click on the hypertext that says "Shorebird Sister Schools Main Page." To quit the Browser program, click on the quit button or click on File, Quit/Exit in the menu bar at the top of the page.

Shorebird Sister Schools Program
E-mail Listserv

Procedure (continued)

2. **Get an E-mail account.**

To use the *listserver*, you will need electronic mail capabilities (an E-mail address). This will allow you to send and receive mail messages from other students, schools, research biologists and other folks interested in shorebirds. For example, an E-mail address can look like this: sandpiper@western.flyway.net

Depending on how your school is set up, you may have an *Internet* connection already or may need to sign up with an *Internet* Provider. Either way, check with your computer folks and they will help you receive an E-mail address.

Then each day you can check the mail and see what others have sent to the listserver. You will also be able to see what has been sent from your classroom. This listserver is designed for quick, interactive communication regarding the migration of Arctic-nesting shorebirds, and everyone is invited to subscribe and post messages on this topic or related topics.

3. **Sign up for the Shorebird Sister Schools Program Listserver once you have E-mail capabilities.**
Send an e-mail message to **fws-shorebirds-request@lists.fws.gov** with **subscribe** in the subject line of the message. If you have any troubles signing up, please contact the Shorebird Sister School Program Coordinator Hilary Chapman at: hilary_chapman@fws.gov

Suggested Activities

1. Get the students on the SSSP web site at least once a week to check on updates of ongoing research. Check more often during migration: those birds move fast!

2. Plan a field trip using the information from the SSSP web site and/or curriculum guide and then "publish" your data by sending it to the listserver.

3. Find pen pals through the listserver. Share with your pen pal everything you have learned about shorebirds, habitats, etc.

4. Have the students think of good questions that they would like to ask research biologists and then send E-mail messages asking them for help with the answers.

5. Have the students use a large wall map to track the shorebirds as they are reported on their migration route. Refer to the poster included with the curriculum.

Extension

Build your own Web Page. Build a web page about your shorebird projects. Include your species list, research projects, map of the area, particular habitat and local threat information, etc. Once your web page is complete and on-line, send an E-mail message to **hilary_chapman@fws.gov** and the U.S. Fish and Wildlife Service will make a link to your site.