Sea to Shining Sea

from the sandy seagrass of southern Florida to the rocky intertidal of southern California...

Live Interactive Virtual Explorations (LIVE)

Biscayne National Park and Cabrillo National Monument

StSS LIVE Backpack Guide

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StSS LIVE Backpack Equipment...

...includes the obvious backpack that you see pictured here.

Inside the backpack is an array of equipment used for Sea to Shining Sea (StSS) LIVE activities.

These are the primary components in the backpack:

Dell Laptop

Digital Video (DV) Camera

Camera Cable

Headset with Mic

Microphone

Dual audio adapters

The *PCMCIA card* is already inserted in a card slot in the laptop (says "IEEE 1394 on top). This card allows you to connect devices to the laptop using an array of peripherals (such as the DV camera).

In addition to these primary components, the backpack contains the laptop power cord, camera batteries, camera charger(s), backpack amplifier batteries, and this manual.

Camera battery charger and camera battery

Laptop power cord

Another component of the backpack system is the camera tripod. The current tripod does not fit into the backpack itself, but don't forget this important piece of equipment when getting ready for your session!

Setting Up for StSS LIVE

Connecting the Camera
Before turning on the laptop, ensure that the PCMCIA card is inserted in the laptop and use the camera cord to connect the camera to the laptop's PCMCIA card. The camera cable has a firewire connector that connects to the camera and the other connector connects to the PCMCIA card, which is connected into the laptop.

Insert firewire connector into the camera's "DV" slot:

DV Camera

Camera Cable

Insert the other firewire connector into the laptop's PCMCIA card.

Once you have the camera connected to the laptop, power on the camera and turn off the "power save" option on the camera.

DO NOT TURN ON THE LAPTOP YET.

You still have a few more things to connect before powering the laptop.

NOTES: To ensure success, here are a few additional tips regarding the *camera and its battery*:

There are two camera batteries in each backpack - the large one lasts for ~45 minutes and the small one lasts for ~20 minutes. The large one *should* last for both your test and the StSS LIVE activity. However, to be on the safe side, take the extra backpack so that you have additional camera batteries with you to the intertidal area for the activity.

If your camera battery goes dead during the LIVE activity, you can remove the dead battery and replace it with the new one.

The laptop (recycled Dell) battery lasts for more than two hours when fully charged.

Connecting the Audio Components
You are now ready to connect your audio components: headset, microphone, and backpack speakers.

The *dual audio adapters* allow you to simultaneously use the headset, microphone, and the backpack's shoulder strap speakers.

Headset with Mic

Dual audio adapters

Microphone

Backpack speakers

The backpack speakers are powered by an amplifier that is located in a pocket inside the backpack.

Place four AA batteries into the amplifier.

amplifier pocket

amplifier

Connect the dual audio adapters to the headset, microphone, and backpack speakers:

1) The headset's pink microphone connector as well as the stand-alone microphone connector goes into one of the dual audio adapters. This adapter is then connected to the laptop's microphone slot (mic icon).

2) The headset's green connector as well as the backpack speaker cable connector goes into the other dual audio adapter. This adapater is then connected to the laptop's headset slot (headset icon).

Turn on the headset (if applicable).
The headset may have an on/off position. If so, make sure that it is in the | position (not the O position).

Power the backpack speakers.

4) Turn on the backpack speakers (press the amp button on the shoulder strap and hold for five seconds (you will see a green light on the other shoulder strap (as shown here). If you don't see the green light, try using a different set of AA batteries.

4

The finished setup should look like this:

As shown in this image, the camera cable connects the DV camera to laptop's firewire slot in the PCMCIA card. The dual audio adapters are connected between the laptop and the audio components.
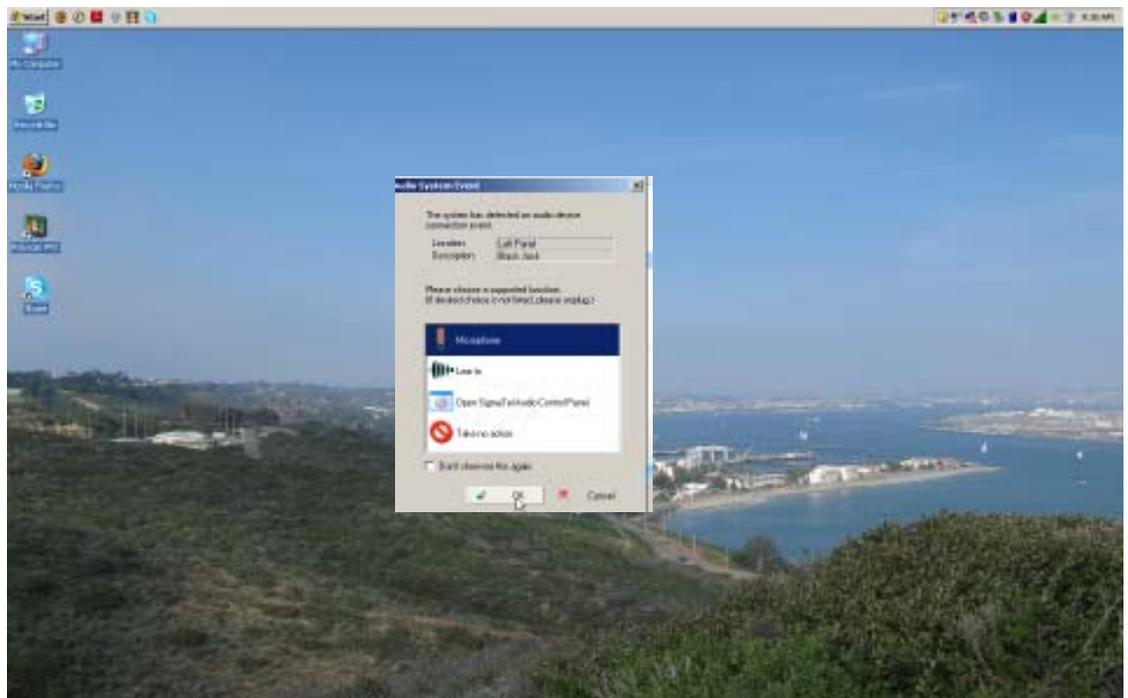
You are now ready to power on the laptop!

Power on the laptop by pressing the power button above the keyboard.

Once the laptop is powered on, your initial screen should look like this (you may or may not see the window shown here).

If you do see this window in the middle of your startup screen, you need to highlight "Microphone" and then click "OK" as indicated here.

You might also be prompted for a user ID and password.
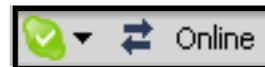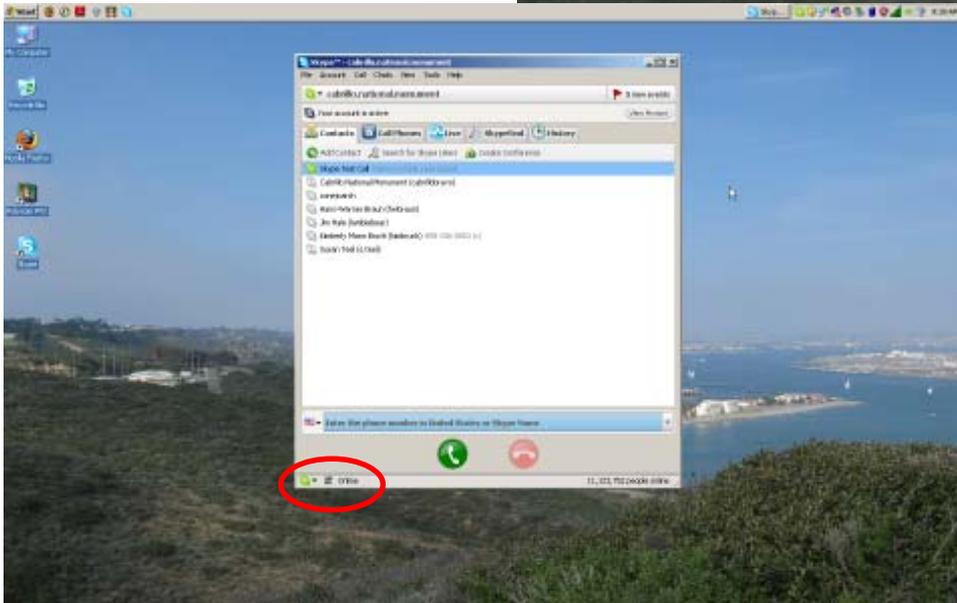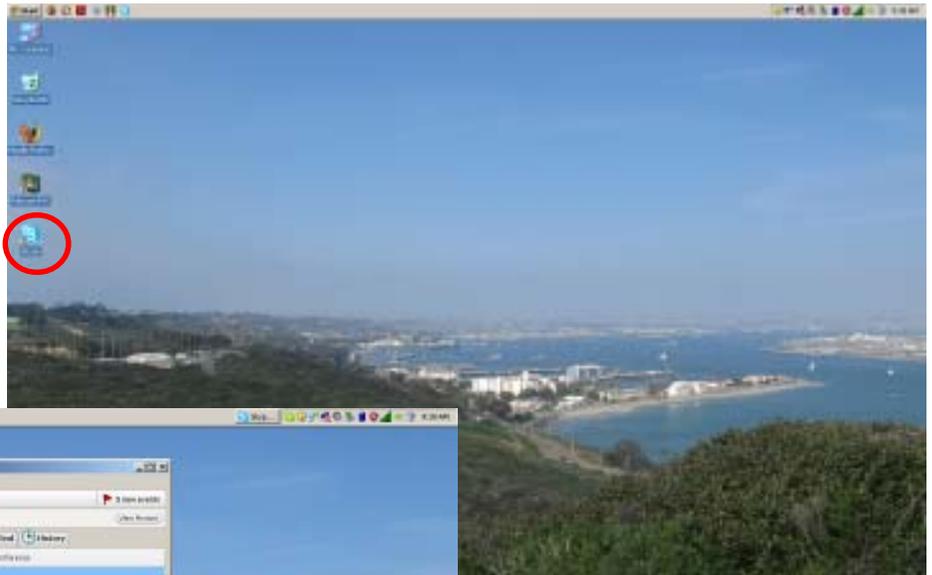If so, the Windows userid is "administrator" and the password is "samo8540".

Testing Skype

 Open Skype.

Double-click on the Skype icon found on the left of the desktop.

User names for Cabrillo are: cabrillo.tidepools and cabrillo.lighthouse. The password for both accounts is CABR.
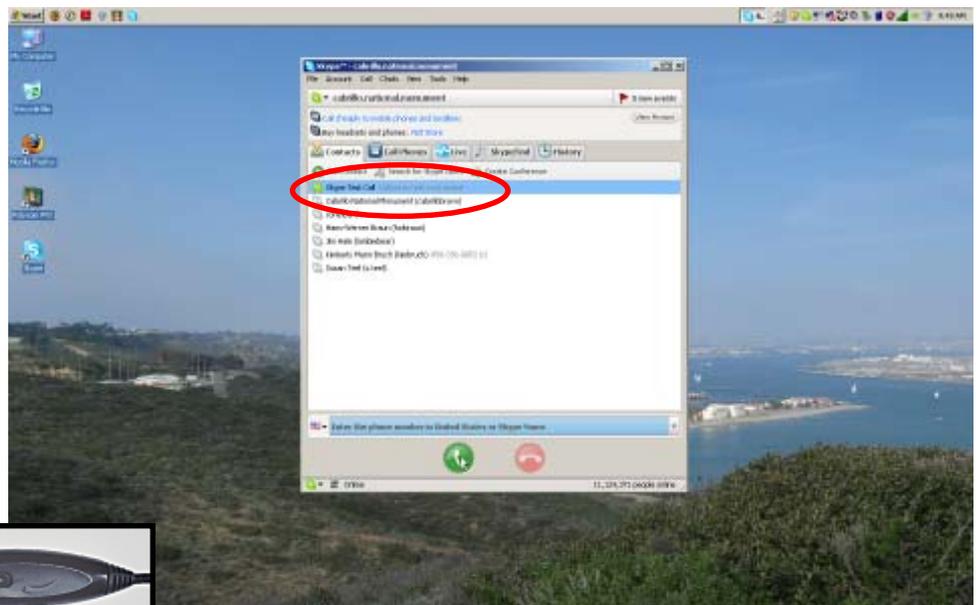

Make sure you are online.

You will see a green circle with a checkmark as well as the word "online" in the lower left corner of the Skype window. This confirms that you are online.

If this does not appear, you are offline and need to refer to the FAQ section on page 11 (Q1).

Test your audio.

Once you are online, ensure that your audio components (microphone, headset, and backpack speakers) are working properly. Double click on the "Skype Test Call" and follow the automated operator's instructions.

If you need to adjust the volume, do so by utilizing the volume control on the headset power/volume control (the little "wheel" on the side of the controller):

Make sure you have on the headset and listen closely to the Skype Test Call instructions. If you are successful with the audio test, you're ready to test your video. If you are unsuccessful with the test, ensure that your headset is powered on and try again. If you are still unsuccessful, refer to the FAQ section found on page 12 (Q2).

Test Video.

Once you are sure that your audio is working properly, make sure that your video is working.
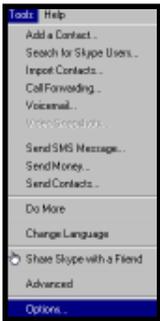
Select Tools and then Options.
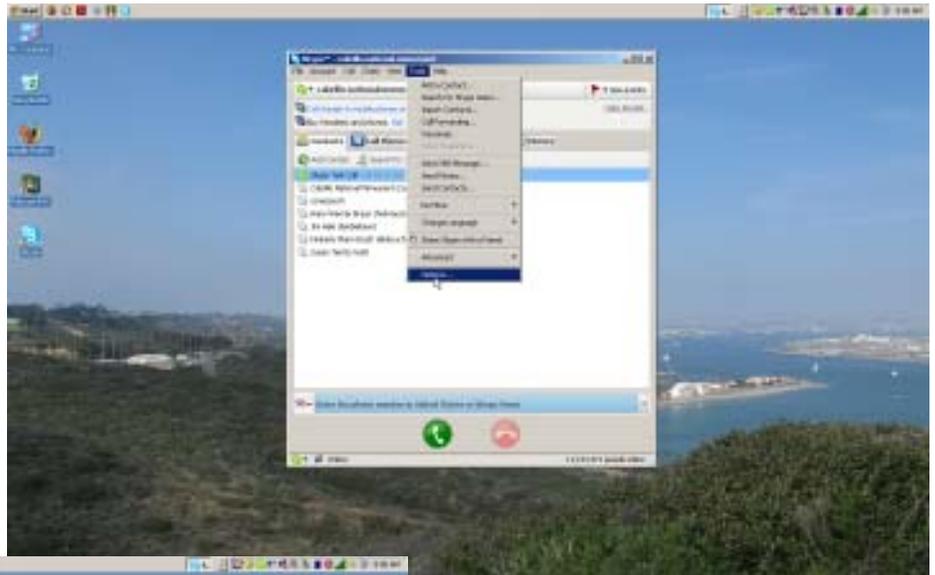
Select "Video Settings" and you should see your video on the right side of the window.

In this example screen shot, you see that the test is taking place at the tidepools area and the DV camera is pointed toward Zone 2.
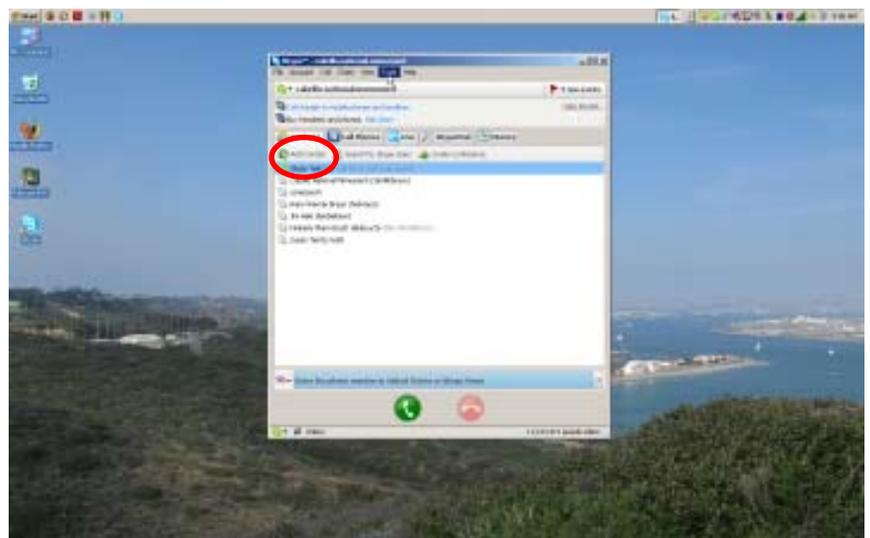
If you do not see your video, refer to the FAQ section on page 12 (Q3).

Add the audience contact to your Skype Contacts.

Double click on "Add Contact" and you will be prompted to type in the user's Skype name.

If you are unable to add the contact name for the audience, call the person and find out what their correct Skype contact name is..

Once you have everything set-up and tested, you are ready for your session! Power everything off, pack it up, and head to the tidepools, lighthouse, or your other LIVE destination!

Using Skype for a LIVE Session at the Tidepools

The bench overlooking the tidepools is a great place to sit down and get your equipment set up, turned on, and connected to Skype.

Ensure that everything is properly connected and power all of your equipment (just like you did in your test) - before turning on your laptop.

Make sure the camera's "power save" is "off".


 Place Call to Audience.

To connect with a Skype user, either double-click on their user name or highlight their user name and then click the green telephone icon on the bottom of the Skype window as shown here.
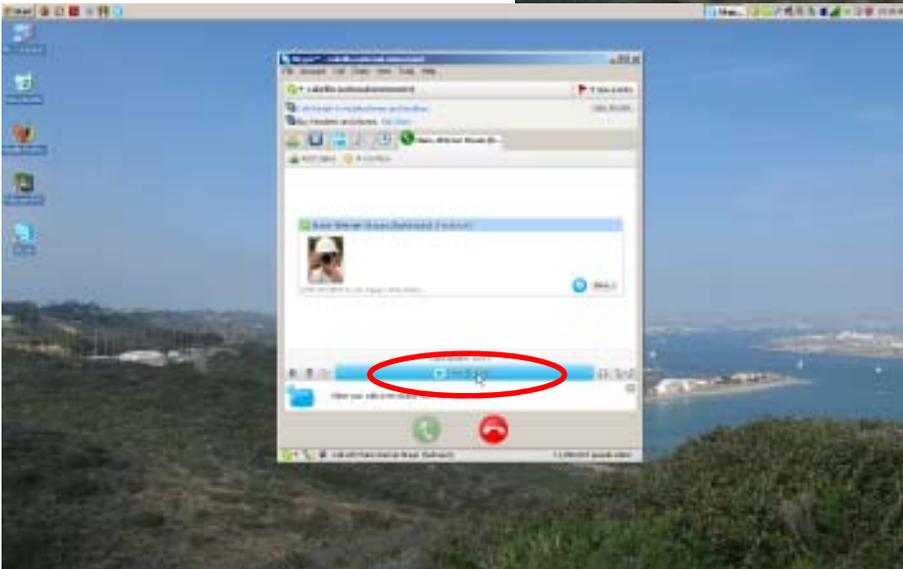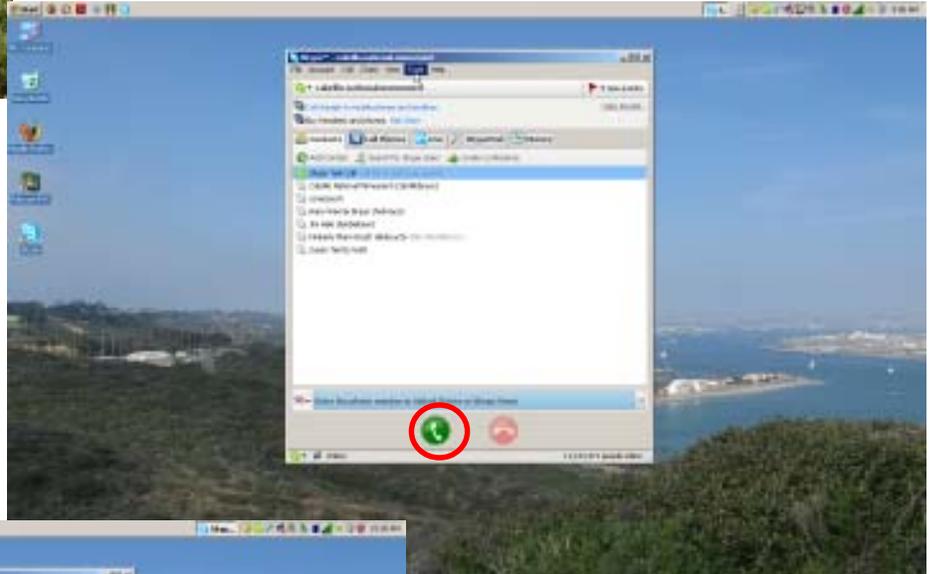
Start Video.

When the person answers the Skype call, "Start my Video" so that the user can see your video. You should also be able to hear and speak with the user. If not, refer to FAQ (page 11, Q2).

NOTES: Use this space to write any information that will assist with the setup process, as this is the first version of the manual and we want to ensure that it is helpful for all StSS LIVE users.
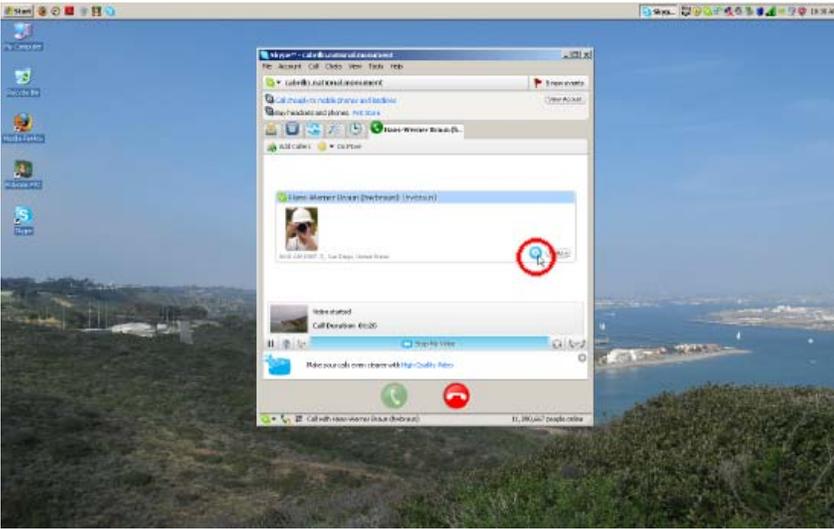
Using Chat.

Once your video is on, your screen will look like this.

If you can't get your audio and/or video to work (but you can hear the person on the other end), make sure that the "Contacts" tab is "on top" of the other options and then click on the chat button to let the user know that you are having problems.


NOTE: If your audio is working, but your video is not working, refer to the FAQ section on page 12 (Q3).

An example of using the chat feature is shown in this screen shot.

Place your cursor in the text box at the bottom of the chat window and start typing your message; then click "Enter" on your keyboard. You will then see your chat message display under a gray heading.

The person on the other end will then reply and their text will display under a blue heading.

The chat feature is very useful if you are having microphone issues as you can communicate with the user via text.
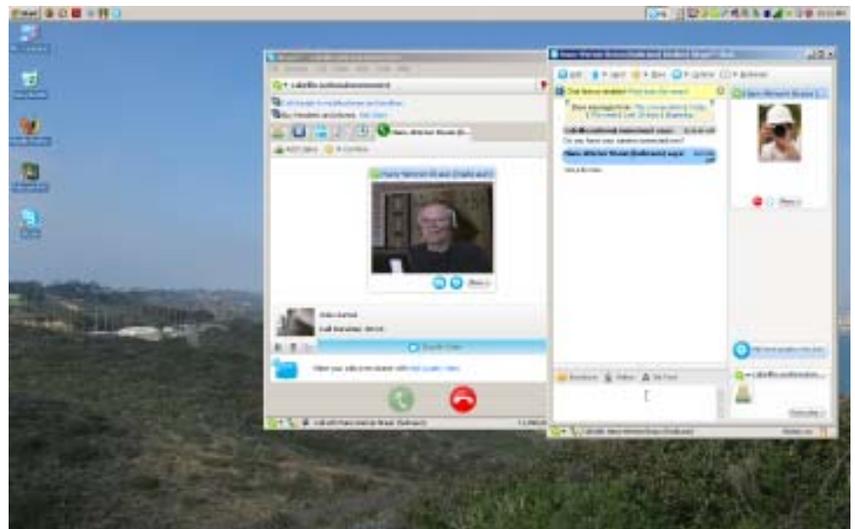
Once you are connected to the user and everything is working properly, you are ready to put all of the equipment into the backpack and test for a few minutes prior to going to the intertidal area.

Ending Session and Recharging LIVE Equipment

Once you are finished with your LIVE session, shut everything down - remember to power off: camera, laptop, backpack speakers. When back at the Cabrillo offices, charge all of your equipment.

The *camera battery charger* is located in the backpack. After each LIVE session, use the battery charger to charge both of the camera batteries. Once the battery is charged, the orange light on the charger will turn to green. Place one of the charged batteries in the camera and the backup battery and charger back in the backpack.

The *laptop power cord* is also located in the backpack. After each LIVE session, use the power cord to charge the laptop overnight. Once it is charged, place the laptop and power cord in the backpack.
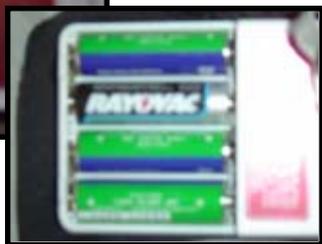
The *backup AA batteries* for the backpack speakers' amplifiers are also located in the backpack. Make sure to place four new batteries in the plastic bag of the toolbox for the next use.

NOTE: To be on the safe side, recharge all equipment the day/evening before your LIVE activity to ensure that everything is charged and ready to go for your program.

Frequently Asked Questions (FAQ)

Q1: I do not seem to be "online". Instead the window says "Connecting". HELP!

A1: First of all, double click on the Mozilla Firefox icon on the desktop and see if you can connect to the Internet. If you are connected to the Internet, your Firefox window will look like this:
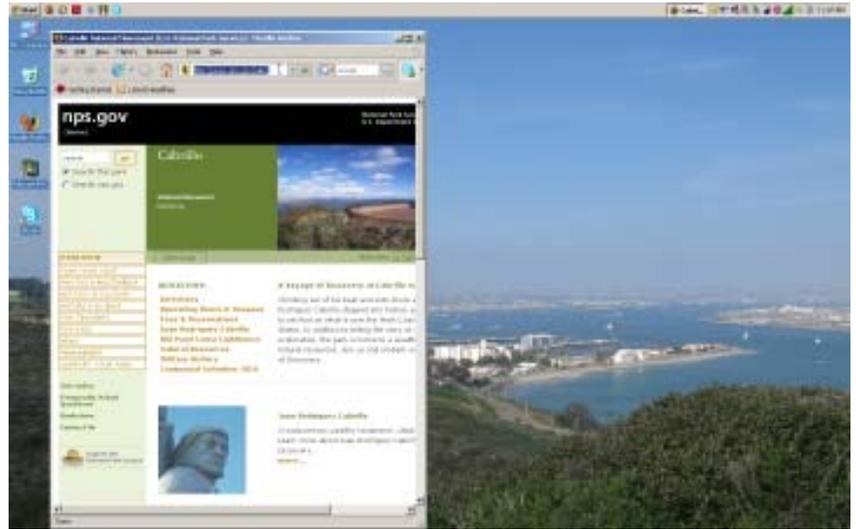
If you see this screen, you are connected to the Internet and there is possibly something wrong with Skype.

To troubleshoot the connectivity issue, you can use the Cabrillo Yahoo Email Account to communicate with a technical person.
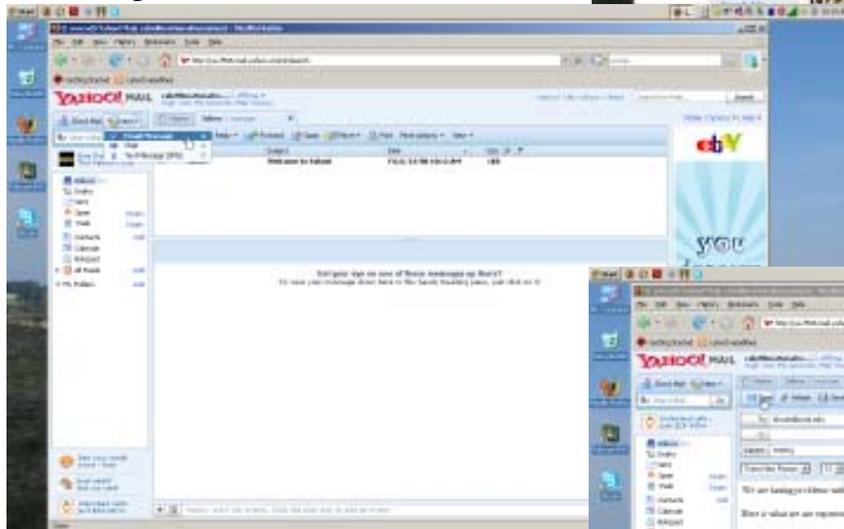
Go to yahoo.com and click on "Mail" as shown here. You will then be prompted to enter an ID and password.
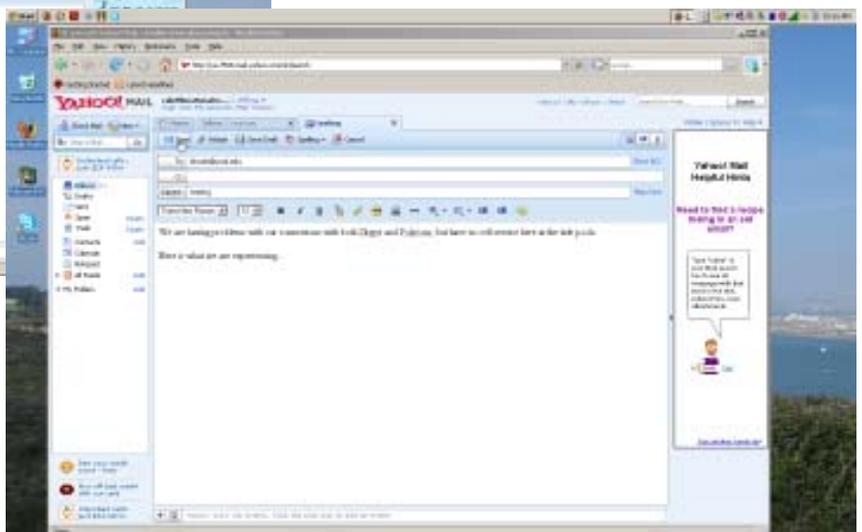
The Yahoo account information is:

ID = cabrillonationalmonument
password = pointloma

Click "Sign in".

Click on New -> Email Message.

Type a message regarding the Skype connectivity problem and send to the technical person (kbruch@ucsd.edu). Press the "Send" icon.

Once you've sent the message, click on the "Check Mail" icon and you should eventually receive a reply from the technical person about next steps in the troubleshooting arena.

When you are finished with your email conversation, click on "Sign Out" at the top of the page.

Q2: I am connected to Skype, but my audio is not working properly.

A2: Refer to Tools->Options-> Audio Settings in Skype window. If your screen does not look like this screen shot, change the settings so that it does (your Microphone and Speakers should be "Windows Default Device". Then, click "Save". If your audio is still not working, reboot your computer.
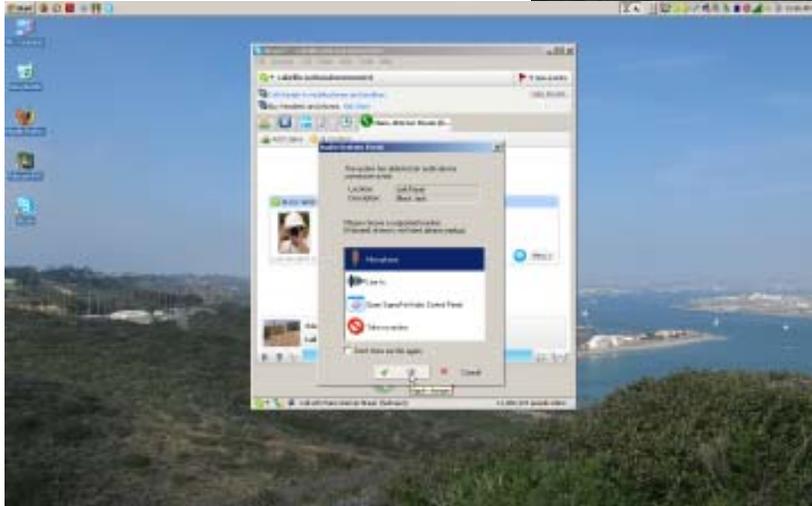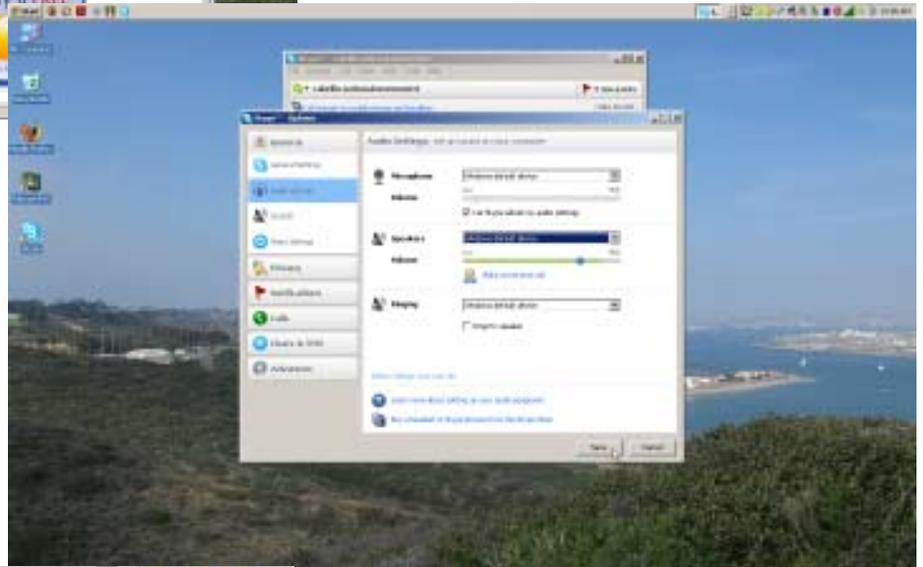
Upon rebooting (or if your microphone becomes disconnected while in the backpack), you may see a screen that looks like this. To resume the use of your microphone, select "Microphone"and then click "OK" as shown here.

If your audio is still not working, try using the backup microphone located in the toolbox.

Q3: My video via Skype is not working properly.

A3: Follow these steps to troubleshoot video problems:

    1. Ensure that the PCMCIA card is all the way in.
    2. Close Skype.
    3. Power off your laptop by clicking on Start ->Turn off computer.
    4. Follow the steps on pages 6-7 to re-test your equipment.

If these steps do not work, retrieve the backup camera from the toolbox (small Microsoft web camera). It is connected to the laptop via the USB connector slot. You might need to reboot the system in order to use the backup camera, however, it should work in emergency situations!

The PCMCIA card should be inserted properly into laptop slot, as shown here.