What is a podcast?
Podcasting is the practice of making audio files available online in a way that allows users to download the files and play them on a computer or MP3 player. In common use, podcasting is often used to refer to independent audio shows that can be downloaded from the internet. It is popular to subscribe to a show and have the most recent podcasts automatically downloaded to your computer.

How can a podcast enhance your birding program?
A podcast enhances your birding program by making information available to visitors and potential visitors in a convenient format. The information in your podcast will not be different from that which birders can find in your refuge brochure or in a birding guide book. What is different is that it is available to them for free online. They can download the podcast and then listen to it at their convenience. They may listen to it before they visit your refuge, or they may listen to it while they are there, like an audio tour. No matter when they choose to listen, the visitor is in control. They do not have to order a book, wait for it to arrive in the mail and tote it around or depend on the visitor center to be open. They can download the information that they need and store it on a very small and portable listening device. The process is easy and is not only popular with the younger generation. Many senior citizens download books on tape or musical recordings. A recent report from the Pew Internet and American Life Project shows that more than 22 million American adults own MP3 players and 29%, or 6 million, have downloaded podcasts so that they could listen to them at a time for their choosing.

Is it difficult to create a podcast?
No, podcasting is not difficult. In fact, what is exciting about podcasting is that it lets anybody with a microphone, a computer and an internet connection publish audio recordings that can be listened to by people anywhere in the world. Because the barriers to entry are very low, podcasting is rapidly becoming a popular way for people to share audio files. Podcasts are almost always free.

How much does podcasting cost?
The software needed to create a podcast is available online and can be downloaded for free. Two of the most popular programs are Audacity, for PCs, and Garageband, for Macs. If you have a PC and chose to use Audacity, you will have to download a second program, LAME, to convert your Audacity files to MP3. This program is also free. You will also need a good quality microphone. The types that come with a headset work well and will allow you to edit your files with out subjecting your officemates to continual replays. Logitech makes a microphone with a headset that sells for about $50 that produces amazingly good quality recordings. It may even be available from your local computer gadgets shop.

Once you begin to edit your podcast, you may want to add bird calls, sound effects or music. You may choose to purchase these in order to obtain high quality recordings. Purchasing audio files will of course increase your total project costs. The FWS has a memorandum of understanding with the Cornell Laboratory of Ornithology and may be able to help with costs for bird and other nature sounds.   Contact Maggie O'Connell at maggie_o'connell@fws.gov or (703) 358-1938.

How long does it take to create a podcast?
Recording the podcast can be done in as little as a day, or may take several days.
When I tried making the recordings myself, I found that I made errors. Some of these errors could be removed during the editing process, but others required that I rerecord a segment. I found that it was better not to try to do a lot of recording in one day. That strained my voice and lead to more errors. Eventually I asked a refuge volunteer, who is active in community theater and also records books on tape for the blind, if he would record the script. He was able to do it in one day. It only took him 3 takes to get the entire script recorded without error.

Writing the script will take much longer than recording. It took me about a week to write the draft and then have it reviewed for content and style by the refuge biologist and ORP.

Editing will also take longer than recording and perhaps writing. You will want to edit out small errors, but you may also wish to add music and sound effects. The editing process is what really decides the nature of your podcast. You can spend a lot of time and money adding bird calls, music, sound effects, etc. Or you can keep it simple and utilitarian. Editing the Pea Island birding podcast, which was eventually a 30 minute long production, took me about 3 weeks with the usual work interruptions and ongoing duties.

What hardware and software will I need?

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Are there any Service policies governing podcasting?

Check out this website for some great information regarding podcasts and government agencies
www.usa.gov/webcontent/technology/podcasting/shtml

Podcasting tips:

National wildlife refuges in the State of Iowa partnered with the Iowa Academy of Science, a local school, to create podcasts about Iowa's 7 NWRs. They chose to use a professional recording studio and editing equipment. The school received a grant from the National Fish and Wildlife Foundation for this project.

The National Park Service has also created a series of video podcasts focusing on Yellowstone National Park. If you check out www.rovingranger.com you will be able to see the videos as well as link to tips offered by the staff involved in their creation. Although these are video and not just audio, many of the recommendations apply. For example, most popular songs are only about 3 minutes in length. It is a good idea to divide your podcast into short segments of about 3 minutes each.

The room that you record in is as important as the quality of your microphone. The room should be as "dead" as possible. Your do not want to hear the phone ringing, coworkers talking in the hall, the air conditioning kicking in, or even the sound of your own computer. Other ambient sounds are muffled if you are in a room that contains buffers such as plants, curtains or fabric cube dividers. The more soft surfaces the better. Hard surfaces accentuate echoes and background noise.

Remember, if you use popular music you could be subject to royalty fees and written material is subject to copyright law.

Helpful websites:

http://audacityteam.org/wiki/index.php?title=Creating_a_simple_voice_and_music_Podcast_with_Audacity
This is Audacity's own help file on how to create a simple voice and music podcast.

http://www.usa.gov/webcontent/technology/podcasting.shtml
defines what podcasting is and gives a very brief overview of how to create a podcast

http://www.podcastingnews.com/articles/How-to-Podcast.html
A good site that explains how to create a podcast, including recommended software and links to more in depth information about the process.

An NPS site that explains how to create video podcasts. This site has good advice about the basics of creating a script, etc., but does not currently have a lot of technical info. It is inspiring though
http://www.rovingranger.com

Tips and advice on creating a podcast from one of the leading podcasting software manufacturers
http://www.aple.com/support/garageband/podcasts/recording

Pea Island Birding Podcast
http://www.fws.gov/peaisland/podcast.html