HOW TO MEMORIZE WARBLER VOCALIZATIONS

One of the great joys of birding comes from walking thru the woods during a Spring warbler fallout and hearing all of our "old friends" singing again. Forming a three-dimensional map of the birds around us is satisfying and also very useful for finding the species we most want to see.

In this section we outline a system that will help you learn warbler songs and calls. We have tested this system many times, most often when learning 300-400 vocalizations for a trip to a foreign country. It works, and it's actually quite easy. If you have a real desire to learn more vocalizations of any kind, this system will help you. In addition to our own testing, the system draws on research found in various articles and books on memory.

Let me emphasize right now that it doesn't take nearly as long as you might think to learn fifty or one hundred bird songs. If you can dedicate 15 minutes a day for even 30 days, I guarantee that you can learn at least 100 songs and probably many more. That's way less time than you probably spend watching commercials on TV.

The key is making the commitment and then taking advantage of the techniques and technologies that make learning many bird vocalizations efficient. And, as you'll see from the studies sited below, you can do it no matter what your age.

THE REALITIES OF MEMORY

Let's first take a quick look at some of the myths and facts about memory and memorizing. There have been a lot of studies conducted on this topic, since memory skills are so important to many areas of life.

Point 1: Almost all people have the same basic capacity for memory. Memory "experts" who can memorize the phone book, are just using good technique to do what everyone could do if they were motivated and dedicated the time. There's no reason to feel that you just don't have the same ability to memorize lots of bird songs that others do. In fact many studies have shown that the capacity of your memory is more a function of your memory techniques than your memory's capacity.

Point 2: There's no such thing as a photographic memory. Again, people who exhibit impressive memory skills are using basic memory techniques. If you put a magazine page upside down, those with "photographic memories" can't recall any of the information.

Point 3: Age isn't the handicap that it has been made out to be. Many studies have shown that, while it takes people older than 50 a bit longer to memorize things, the retention ability of old and young people seem to be about the same.

Point 4: It's a myth that by learning some things you are removing other things from your memory; the first in, first out myth. This is similar to the belief that there may be some detrimental (sorry, pun intended...) effect from trying to memorize too much. Both of these myths just aren't true. Many studies have shown that people seem to have an unlimited capacity to memorize, given the motivation and proper technique.
That being said, it is much more efficient to memorize a small number of facts or songs, say 8-10, than trying to memorize 20 or 30 at the same time.

Point 5: The most important aspect of memorization is concentration or focus on the task. This requires a commitment to the goal, and then dedicating the necessary time in a focused and controlled way. Listening to warbler songs while driving can be useful but it is definitely not the best way to learn many vocalizations. The good news is that the time required is not really very much.

Point 6: Research has shown that memorized connections are stronger and easier to recall if visual imagery is used. Let's say you want to associate the words fish and bicycle (no doubt an association you have had to make at some point in your life...maybe you're biking to the store and you want to remember to buy some fish..) Rather than just repetitively reviewing this association, or just repeating the two words over and over; you'll have stronger retention if you create a visual image of the two objects you are trying to associate. In other words, visualizing a fish trying to ride a bicycle is much more effective for the recall process than just repeating

"fish, bicycle; fish, bicycle". We strongly recommend using visual imagery for song recognition and have created a visual mnemonic image for each species in the Master Pages.

SYSTEM FOR LEARNING WARBLER VOCALIZATIONS

So based on our experience and reading, here is a system we believe will allow you to efficiently and easily memorize many warbler vocalizations.

STEP 1: Download and install iTunes
We recommend using this free program to play back the vocalizations you will be studying. It's very easy to use, free, and is much better than trying to use a CD or tapes. You need a way of playing back songs quickly in small collections in an unpredictable order. iTunes does this very well.

STEP 2: Collect all of the vocalizations you want to learn and put them into a Playlist.
You can get warbler vocalizations from CDs or downloads from Cornell University and other sources. It's very easy to load a CD onto iTunes, and the track or bird names should automatically be added to the playlist.

There are many helpful articles online about how to make playlists if you need assistance using iTunes. It's really very easy.

STEP 3: Make a new Playlist of the first 6 or 7 vocalizations you want to learn.
It doesn't matter which ones they are, just be sure to start with fewer than 10. If you are learning contact or flight calls, start with 4 or 5 from different categories, i.e. one or two examples from the Falling Pitch, Steady Pitch and Rising Pitch categories.

STEP 4: Look at the first name, listen to the song, and then try and form an image that connects the bird song with the bird's name. This image can come from the shape of the song, or maybe the rhythm or pitch of the song. It's very important that the image you use be strongly connected to the vocalization.

Since this is such an important part of the process, here are a couple of examples. Of course this is a very personal process, and you should use our mnemonic suggestions in the Master Species pages only if you can clearly "see" the image when you hear the song. Otherwise just create your own. It gets easier and easier to do this after you've done a few and have had success using them to remember songs.

The Common (Maryland) Yellowthroat sings a song often transliterated as "Witchity Witchity Witch". Visualize a bird traveling from Maryland to Witchita. To strengthen the connection, make the mode of transportation a broom and the bird a witch named Mary.
She could also have a black mask and be on her way to rob a bank in Witchita.

The Chestnut-sided Warbler sings "Please, Please, Please to Meet you". Visualize a gentleman dressed in a chestnut-colored vest and a yellow cap greeting guests.

The Prairie Warbler sings a buzzy song that slowly rises in pitch. Picture a gently rising Prairie field filled with bees buzzing. If you picture yourself walking in this yellow field, like the color of the bird, you will have an even stronger image.

Of course the images you use will of necessity have to be personal. Often it is easiest to find an image for a song by listening without trying to connect the song to the name. Once you have a clear visualization of the song's shape and content, then you can more easily find a way to connect that image to the name of the bird. Creating these images and visualizations of the songs can actually be a lot of fun. And it does get easier with practice.

Continue to listen to and form images and name connections to all of the first group of songs.

STEP 5: After a short break of only 1 or 2 minutes, test yourself on the vocalizations. Making yourself actively recall the name soon after learning a song is absolutely the most important part of the learning process. Listen to the songs, without hearing the names, and retrieve the image you created and name the species.

Be sure to actively recall both the bird's name and the image you created for this species. It helps if you say the name of the bird out loud, creating another auditory connection to the song. This technique also helps when trying to remember where you put your car keys. Just saying "I'm putting the car keys on the scrabble board" will help you remember where they are.

It is very important that you actively do this, and will NOT work if you hear the name of the species first. If you are using iTunes and the name of the song is spoken at the beginning of the track, you can mute the output briefly as the next song begins to play. And be sure not to look at the name on the screen until you guess.

Once you guess, check to see if you were right. If you make a mistake, listen to the species you thought it was and the mistaken species vocalization and recalculate your image.

Then use the arrows to advance to the next song.

iTunes also has a Random playback feature for each playlist called Shuffle. Highlight the playlist and go to Controls --> Shuffle and just turn on Shuffle. That will give you a different order for the playlist each time you choose it.

A key discovery in the science of memory is that for effective memorization, the management of time is extremely important. Most loss of memory happens within the first few minutes of the learning process. So an effective memorization technique must include a review of the associations and images you have created fairly soon after the first attempt to memorize them. And "testing" the memory often and soon after the first associations increases the pathways for retrieval and is an important part of learning things quickly.

If you make a mistake, adjust or remake your image for that song. Often listening to the song a few times will bring something to mind. If not, leave it and work on it the next time you test yourself.

STEP 6: Later that same day, test yourself again at least once. Twice is better. Each time listen to the vocalization without the name and actively recall the species.

By this time you should know most or all of the songs fairly well in your first short Playlist. To increase your recall even more, try looking at the species in the Finder or Master Pages sections and recall your image for the song and then the song itself. Even sing it if you can. This kind of active recall creates much stronger connections in your brain between the song and the name of the bird.

Note that Steps 5 and 6 should only take a couple of minutes each. Large amounts of time are not needed for this learning process. What is needed is focus and also repetition of the testing and review process, fairly often at first.

STEP 7: The next day, review the first playlist by testing yourself again. By now you will almost undoubtedly have learned this first playlist and be able to correctly identify each species.
Continue to review this playlist every day or two until you feel very confident, then continue to review every week.

STEP 8: After feeling confident with the first group of vocalizations, repeat this process again with a new playlist of 6 or 7 species.

If you are having trouble with certain species, maybe in the same playlist or different playlists, create a new playlist with just the difficult species. Studying them this way will help you refine your image and notice the differences between the vocalizations. Studying the sonograms in the Master Species pages can also help.

STEP 9: This is an optional step, but we find it valuable: Once you have learned a number of songs, create some new playlists with similar-sounding species; ones you are having troubles with or just similar-sounding vocalizations.

For example, you might have had Black-throated Blue's song in one playlist and Cerulean's in another. Since they are similar songs, put them, along with Blackburnian and a couple of other similar species, into a new playlist for your testing sessions. You can use the similar species listed in the Master Pages as your guide. This will help you make sure you can differentiate similar vocalizations, especially if they happened to be in separate

playlists initially.
You might have a playlist with all trills, or another with Black-and-White, Cape May, Bay-breasted and some other similar 1 Section 2-Part Element species.

Also, if there is one species you are having trouble with in a particular playlist, but are 100% on the other species, create a new playlist with just these troublesome species. That will save a lot of time during your testing sessions, as you won't have to review the 100% songs nearly as often.

And that's all there is to it. And notice it isn't even a 10-step program!
We are confident that using this system you will be able to learn to recognize all of the standard US warbler songs with only short learning and review sessions over the course of a couple of weeks.

SUMMARY OUTLINE OF THE SONG LEARNING PROCESS

- Load your target trip songs into iTunes
- Break the master list of all of your trip bird songs into very small groups or playlists of 6-10 songs each
- Start with one Playlist
- Play the songs one at a time and find an image that naturally occurs to you when hearing each song
- Find a way to associate that image with the name of the bird
- Review the songs and images after a break of a couple of minutes
- Then test yourself within 10 minutes by playing back the songs in random order, without listening to or reading the song names.
- Repeat this process a couple of times
- Once you can name all of the songs accurately, start on a new playlist
- Review each learned list briefly once a day, if possible. The faster you are at recalling the image/bird song name, the faster this review process becomes.
- If there are songs you misidentify often, put them in a "problem song" playlist.
- Once you have learned 5 or 10 playlists, create new playlists that group similar-sounding birds together.
- Test yourself on these playlists along with the original lists and update them with additional birds as you learn more. These lists can be much longer than the original playlists, as they are songs you now know.
- After you have gone through all of your target birds, review your now learned playlists once or twice a week

References
* *Your Memory: How it Works and How to Improve It* by Kenneth L Higbee
** *The Memory Book* by H Lorayne and J Lucas
***How the Brain Learns* by David Sousa