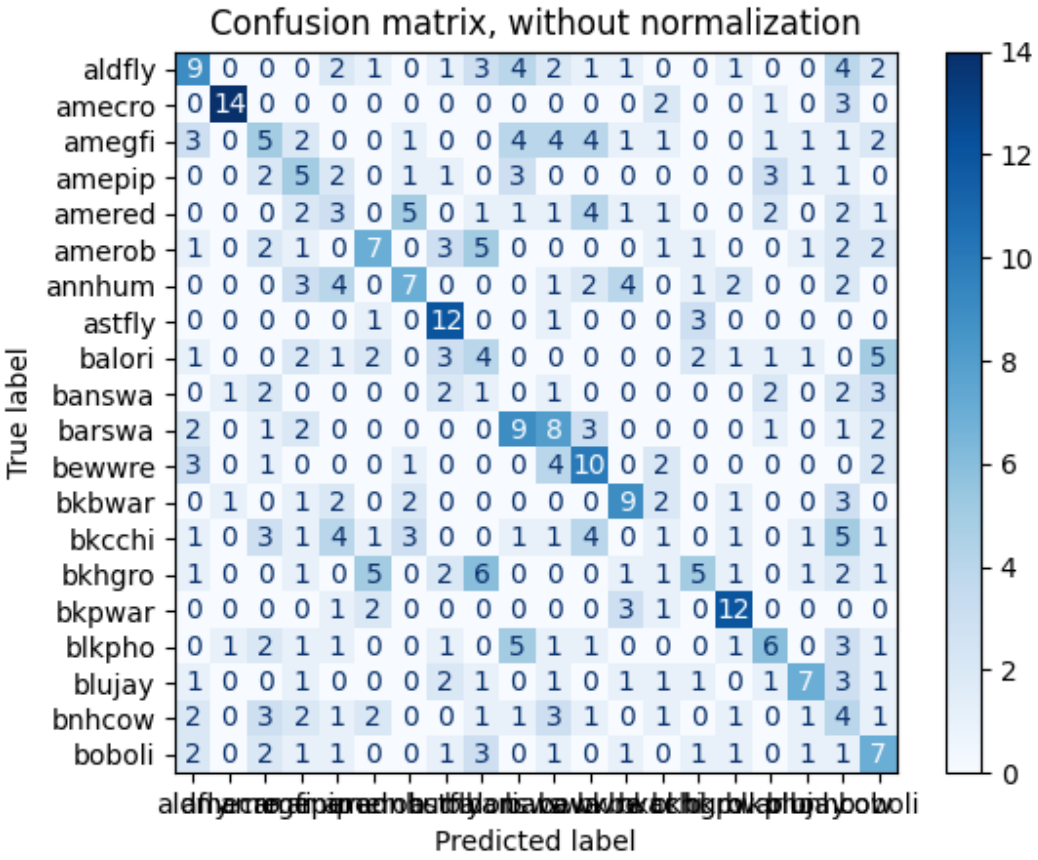
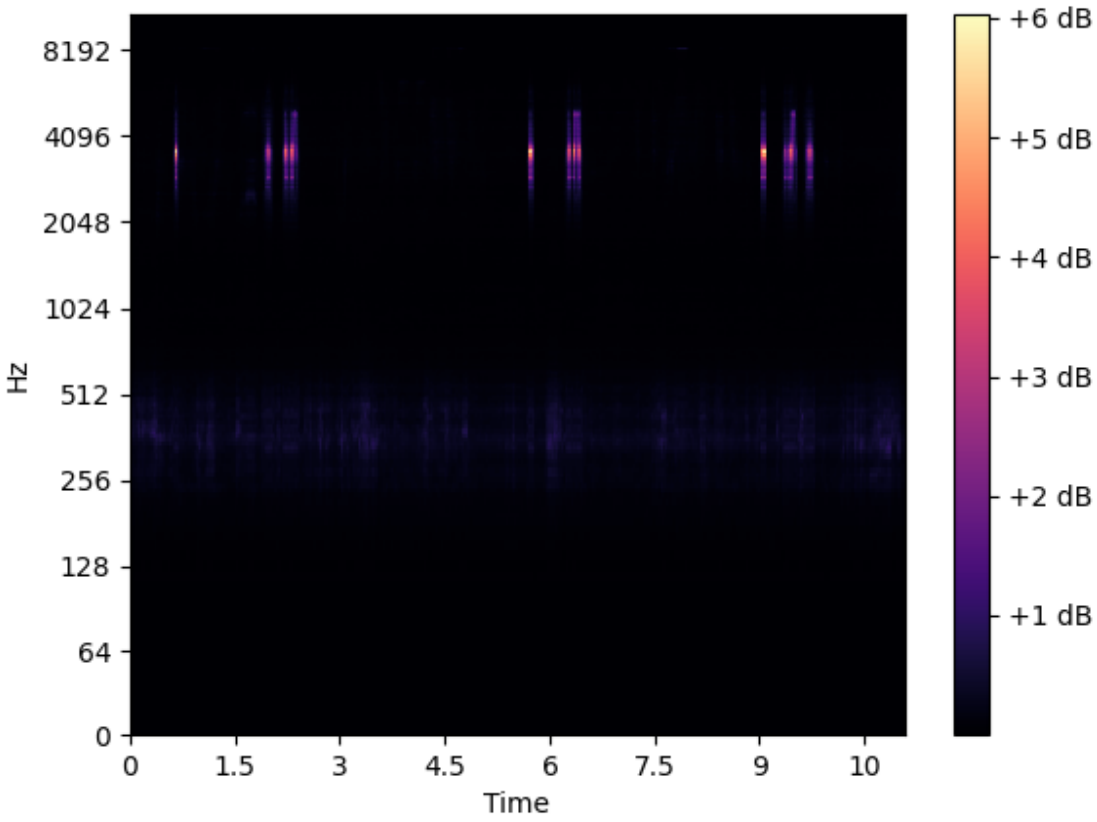
Deliverable 3

1) The results from my model give a test accuracy of a little over 31%. Included below is a confusion matrix of my data. The x axis titles got a little squished but they are all the same as the y-axis. The American Crow, Ash-throated Flycatcher and Blackpoll Warbler had the highest scores whereas the Sand Martin(banswa) had a score of 0. The confusion matrix does show a trend along the diagonal which is what a confusion matrix should look like. I hope to eventually be able to improve the classifier to increase the test accuracy. My current model utilizes a SVM, where I first resize each spectrogram then insert it into a PCA. I plan on implementing a CNN in the future, as I believe this will work better than my current method.



This is a spectrogram of an Alder Flycatcher's call.



2) I plan on integrating my model into a website that will allow a user to upload a bird call and it will classify the bird. Although at the moment the classifier can only classify 20 species of birds, I plan on increasing the number in the future. I currently have no experience with creating websites, but I will be using online tutorials as well as last semesters tutorial on creating websites.