Installation and operation of Birdcall 1 (release 1.1.4.3)

(Birdcall 1.1.4.3 is an interim name for the program – referred to in this document as Birdcall 1.)

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About Birdcall 1

Bircall 1 has been designed from the outset to be able to quickly analyse and tally specific birdcalls from large soundfiles, and also large number of large soundfiles.

Installation.

Birdcall 1 will have been distributed either by direct email, or as a download from the internet. In either case, the filename will end in ".zip_".

An installer has not yet been build for Birdcall 1, so until that is done, the application needs to be installed manually.

Step1: Right click on the downloaded file, and select 'rename' from the dropdown menu. Change the filename extension from ".zip_" to .zip.

Step2: Double click on this downloaded file, which now has the .zip extension. It should automatically open up as a folder. You will see another folder inside the zip folder, simply called "Birdcall". (If you can't open zip files, then consider installing a free zip utility like jzip or 7zip)

Step3: Drag this folder called "Birdcall" to a suitable place of your choice on your PC (maybe in 'My Docs", or even on your desktop, depending on your personal style for managing things.

The process of dragging the folder from within a zip folder to an 'unzipped' place on your computer, autmatically invokes the process of unzipping the files.

That's it. Birdcall 1 is now ready to run.

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Operation

Background.

Hierarchy – records, sessions, workspaces

Birdcall 1 is designed to operate on sessions of recordings, and generally, a session could be understood to be a particular study, for example. A session would be expected to contain a number of individual recordings. Sessions themselves, can be contained within a larger grouping, called a workspace. You can have a number of workspaces. Workspaces, sessions, and recordings are managed within Birdcall 1 by a separate window, to help you navigate the heirarchy.

Record = a particular .wav file as generated by a recorder.

Session = a group of recordings that have been assembled by you, perhaps for a particular study, or perhaps for a given time period, in whatever way works for you.

Workspace = an overall grouping that contains one or more sessions, again to help manage the groupings of data. You can have more than one workspace on you computer. It is possible to generate and export the numbers of birdcalls, for any record, for any session, or for any workspace.

With this in mind, it makes sense to organise the place you keep all you records. You can do this however you like, but here is a suggestion:-

My Documents
- Birdcall (new folder)
  - Workspaces (new folder to contain Birdcall .ws workspace files)
    - Birdcall_sessions (new folder to contain the actual sessions)
      - Session1 (new folder for a project)
        - individual .wav files for that session

Filenaming convention

< this section of manual to be completed>

If this is used, then within a working session, then the records will be in chronological order, and you can quickly step from record to record as you process all the data for the records in that session. If arbitrary names are used for .wav files then the order in the session listing will default to alphanumeric.

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Let's get to work and process some soundfiles.

Starting Birdcall 1.

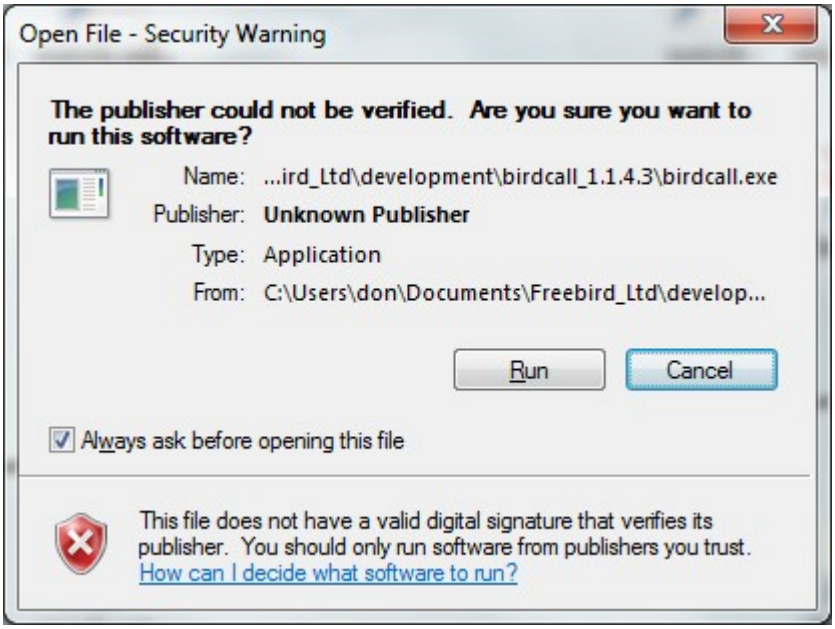
Insert your license key on a usb port on your computer.

Locate the folder called Bircall, (the one you dragged out from the zip file).

Open this folder and locate the file called Birdcall1.1.4.1.exe.

If you like, you can right click on this a create a shortcut to put on your desktop.

Double click on the .exe file (or the shortcut) to start the program.



Select 'Run'

Once the program is opened...select 'New Workspace'

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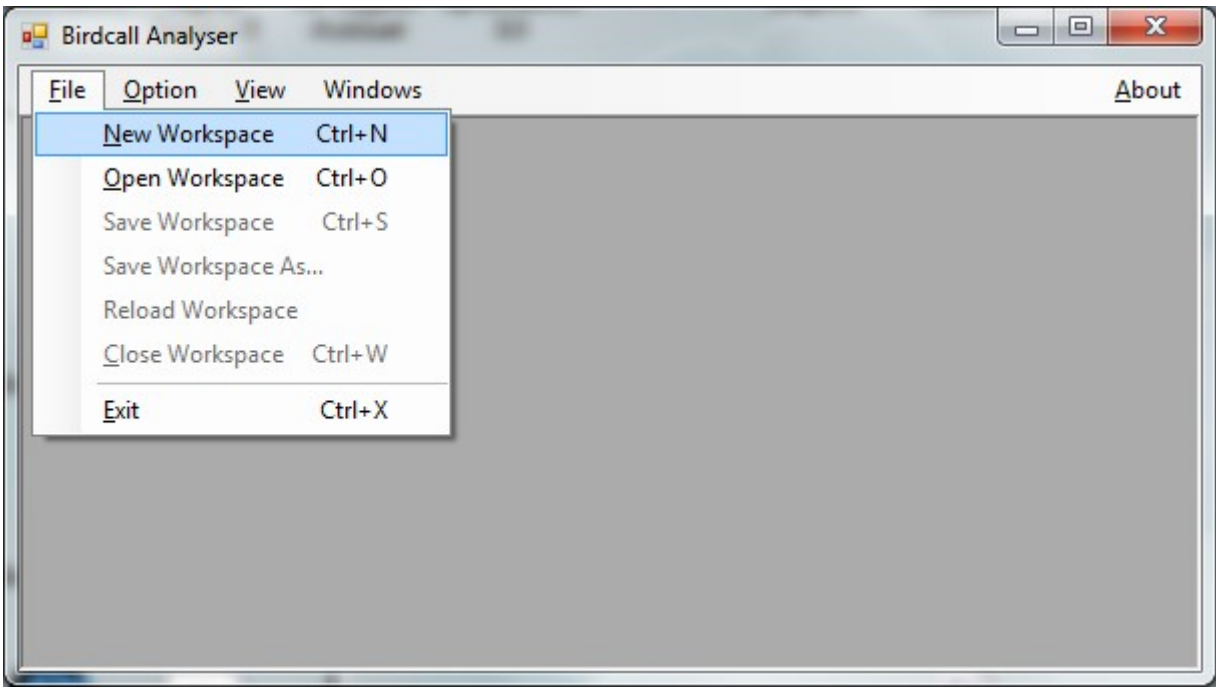

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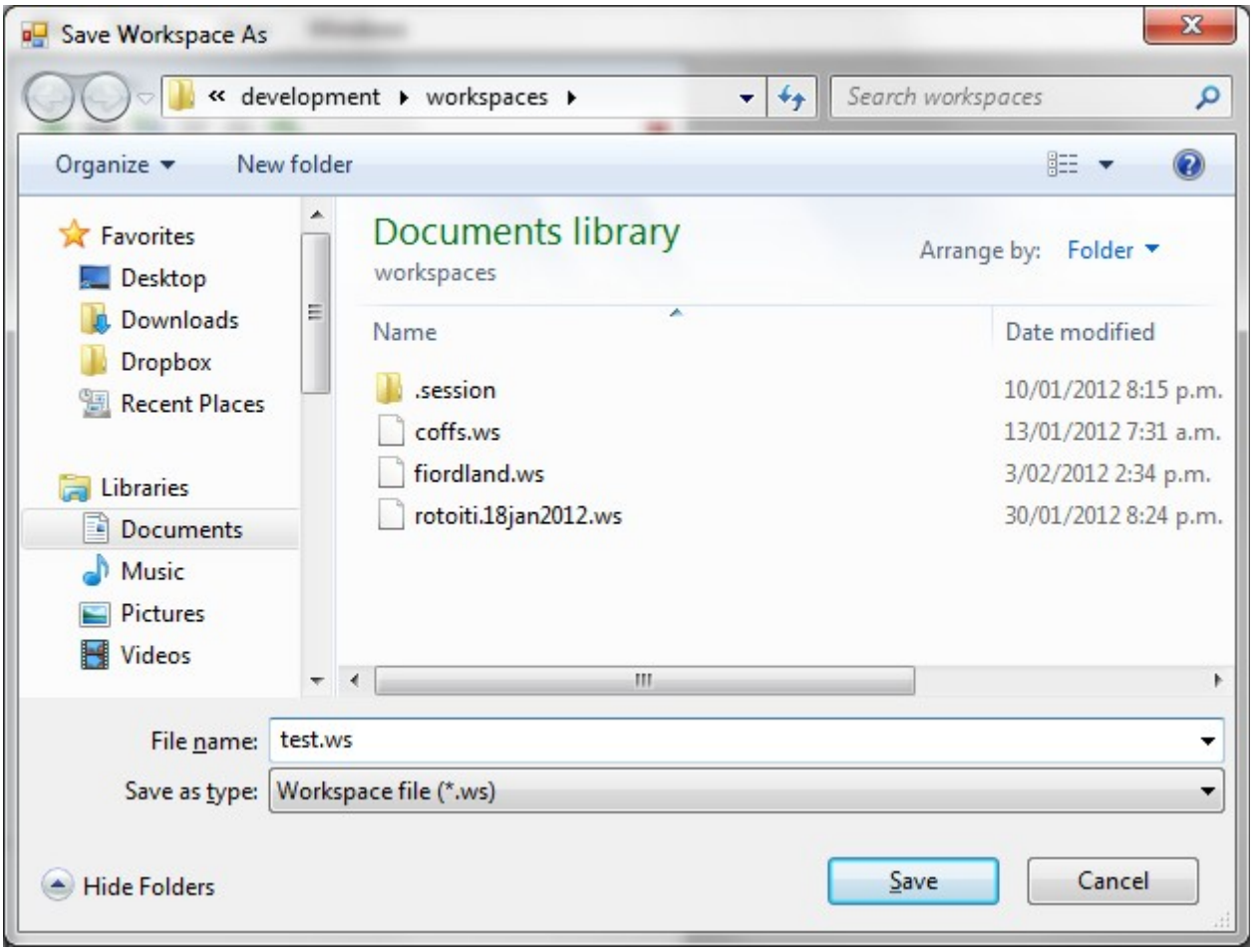
Workspaces

Once you have created a new workspace...you can use 'Save Workspace As..” from the drop down File menu



In this case the workspace has been simply named 'test'.

Now you can add sessions to your workspace.

Sessions correspond to actual folders of .wav files

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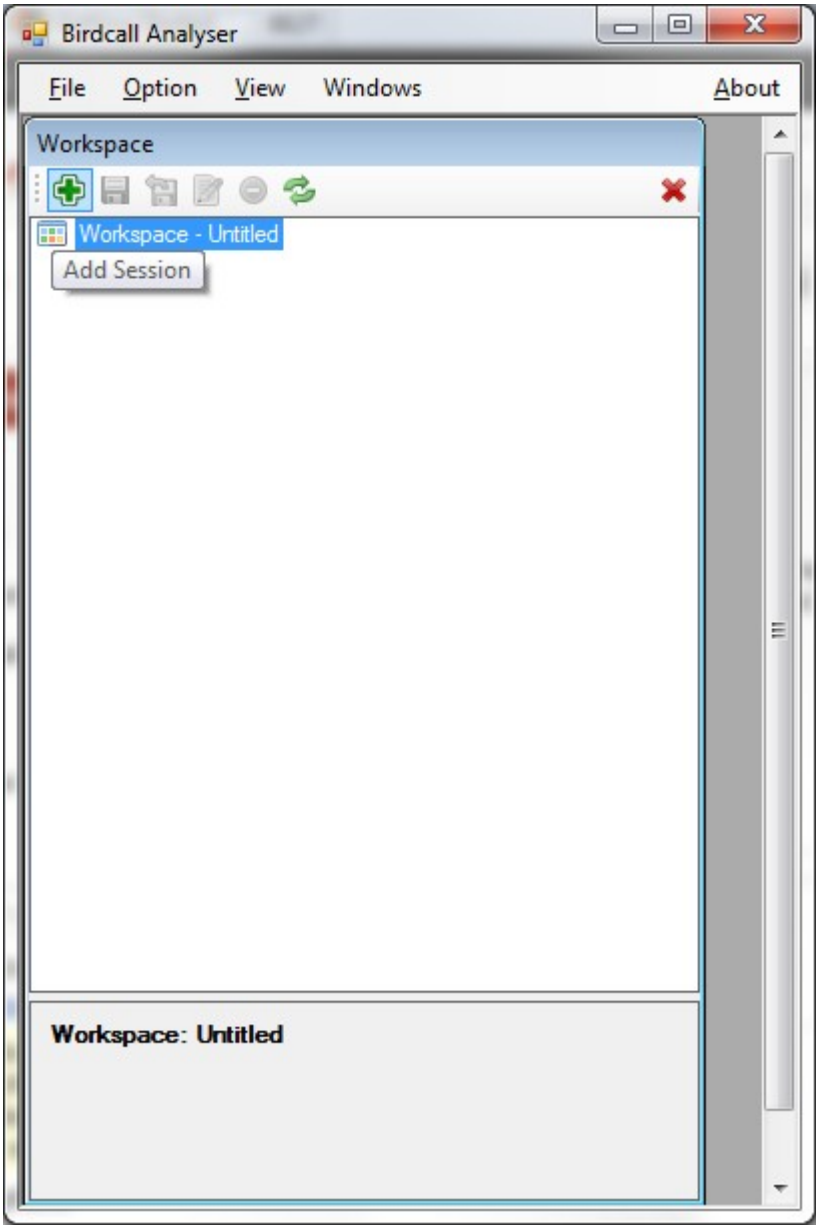
Managing Sessions

A good way to manage sessions, is (in your preferred location for keeping your records) is to create a folder for each session. Use the standard Windows file manager tools for this. In each session folder, place all the .wav file records for that session.

Once you have created the real session folder (with its contained .wav files) you can then add that session to your workspace by clicking on the grron cross at the left of the workspace toolbar. When you do this you can then navigate to the session folder, and then click 'OK'



Your chosen session now appears in the workspace, and by clicking the '+', all the .wav

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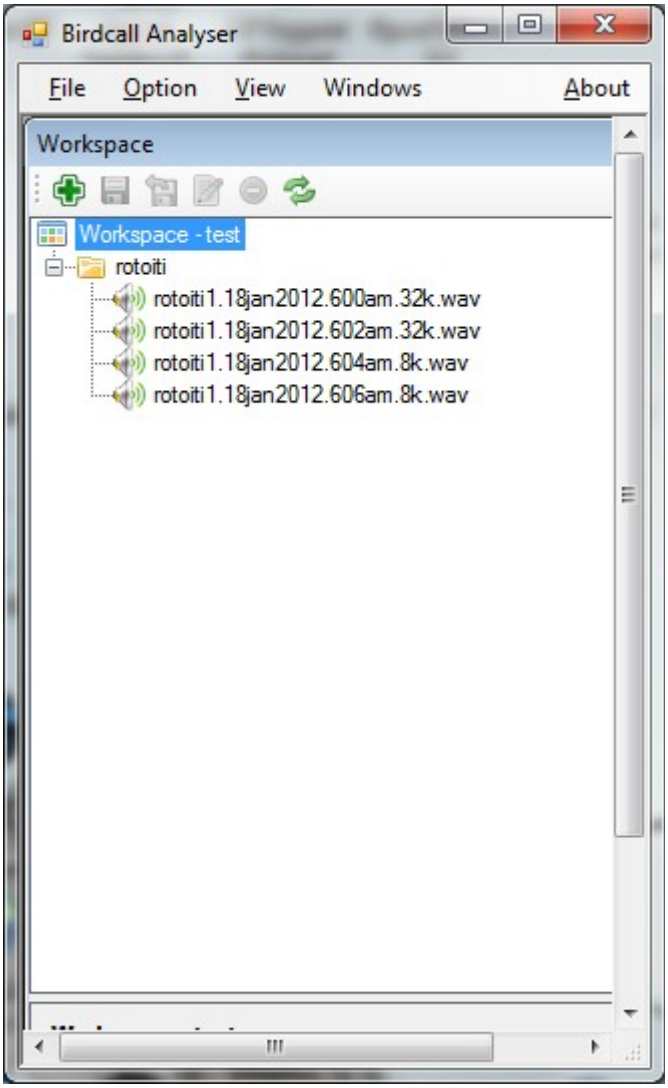
files appear, along with the current work status.



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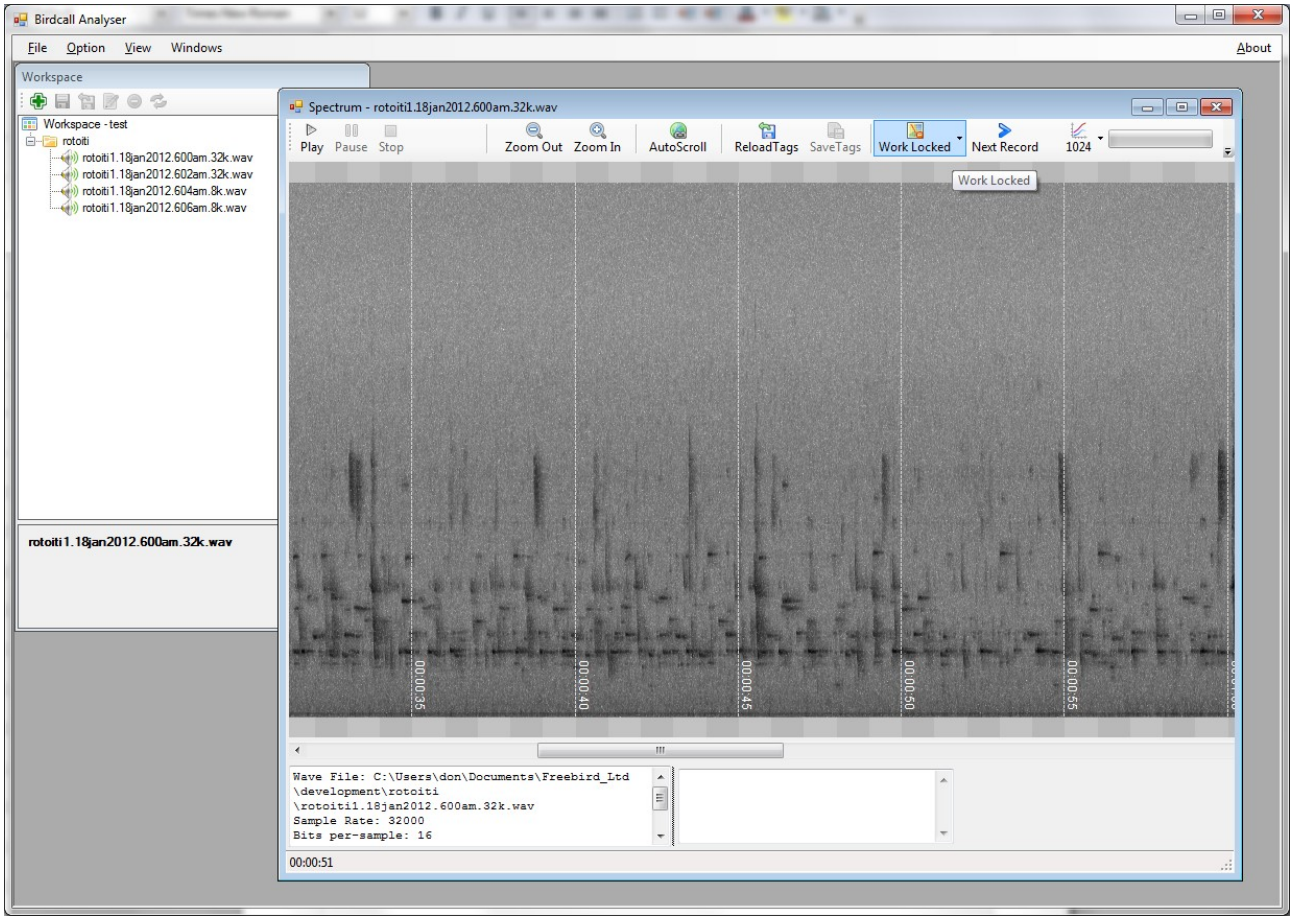
Analysing sound records, and using the session structure

Double click on the first (top of the list) .wav file in your session.

The working area will open up showing the spectrogram of the .wav file



On the spectrogram toolbar, note the 'Work Locked' tag. This prevents changes to the analysis, until you are ready to start work.

Select the 'Work Locked' tab, and change to 'Start Work' Note that the icon next to the file in the workspace sessiisn has changed to the work in progress icon.

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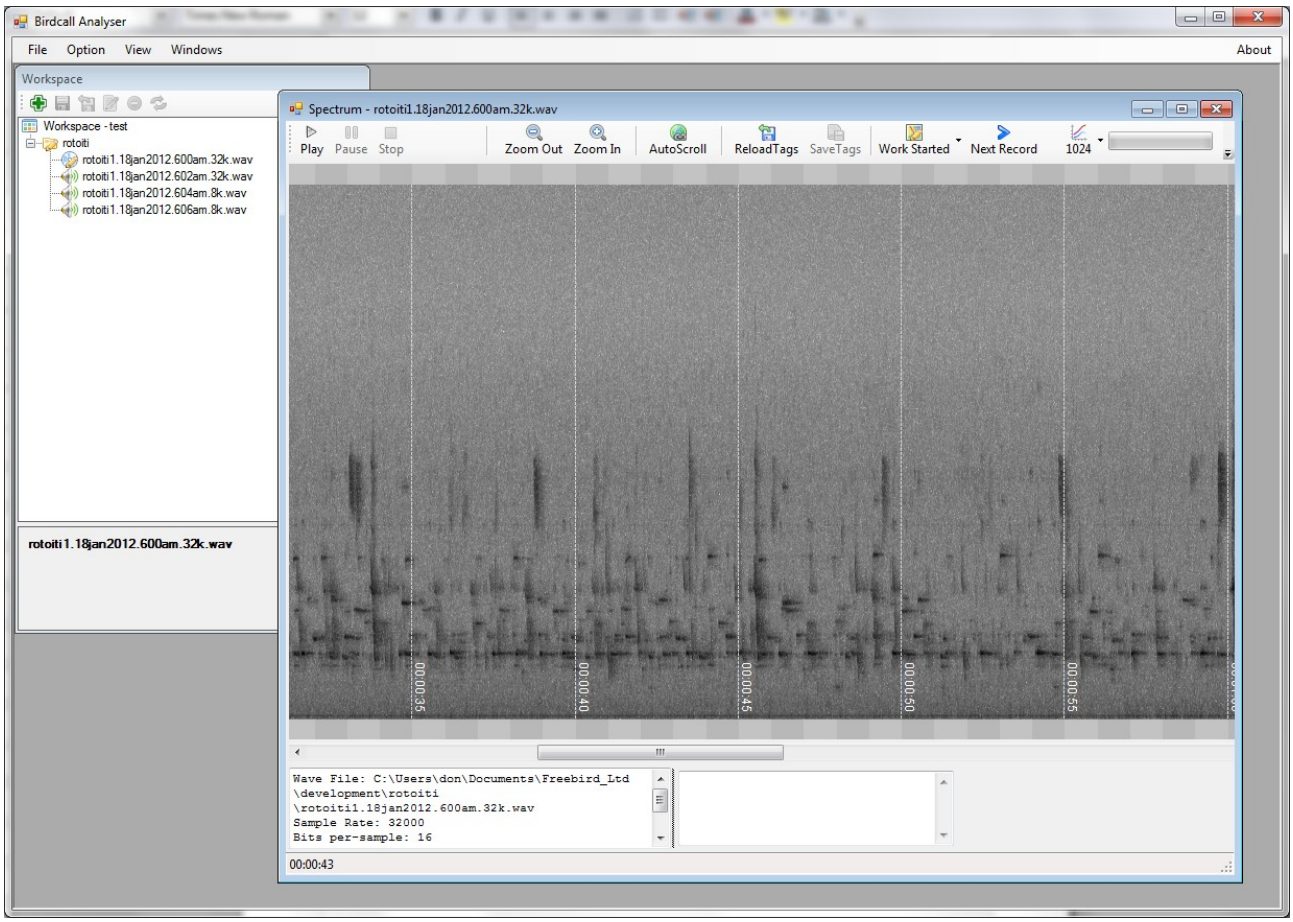

Listening to the record.

You can use the play, pause, stop buttons on the left of the spectrogram window toolbar. Or you can simply triple left click at any position to start playback from that position.

Now you can identify birdcalls and add identifying tags.

Mark a birdcall.

The process of quickly and efficiently identifying, marking, and exporting birdcall results is the core of the Birdcall 1 program.

To add a tag (birdcall marker)

Move the mouse to the top left of the bird call to mark, Press the 't' key, the cursor changes to the add tag cursor. Press and hold the left mounse button and drag the mouse to the right and down to create rectangle over the birdcall to mark.

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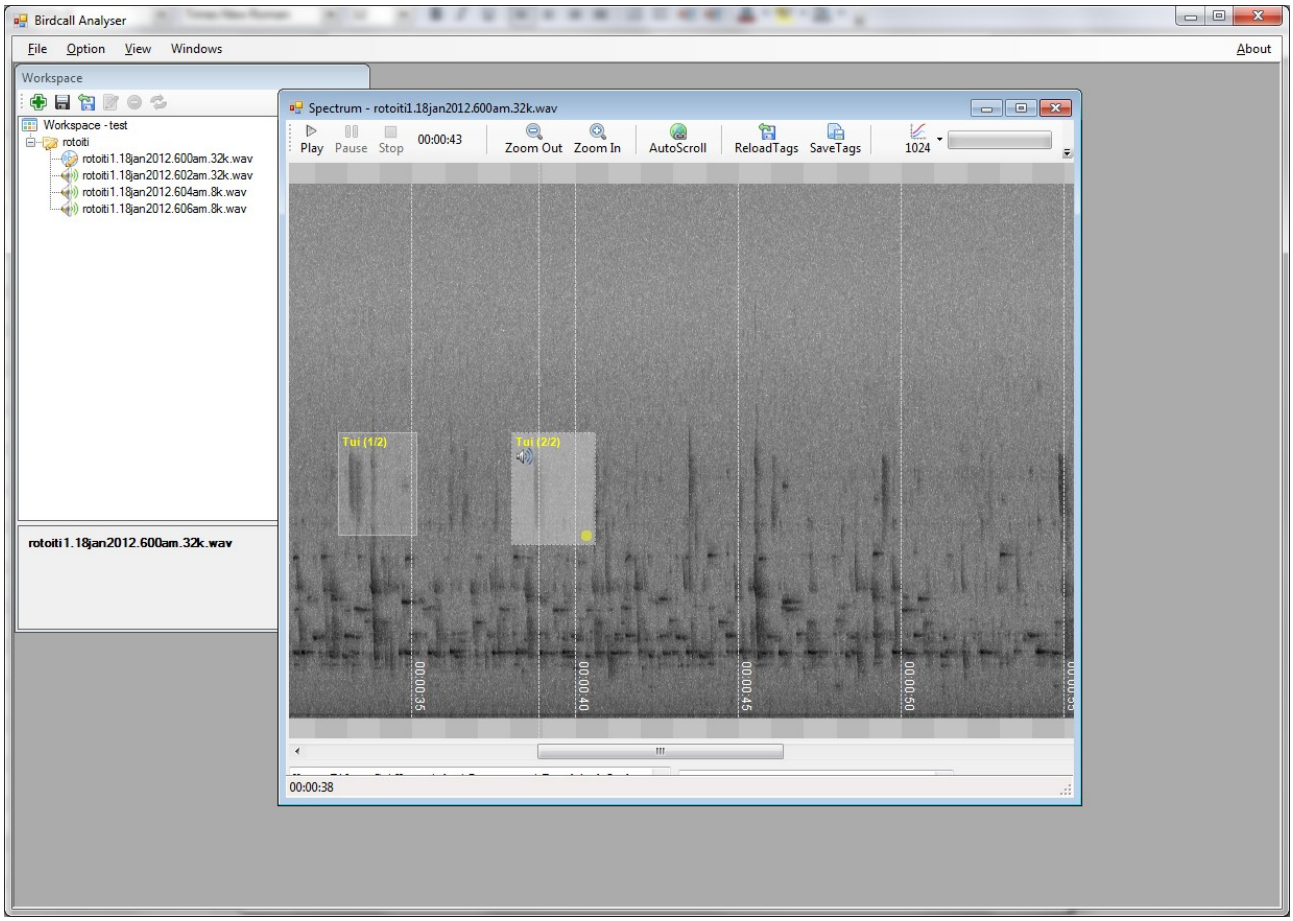
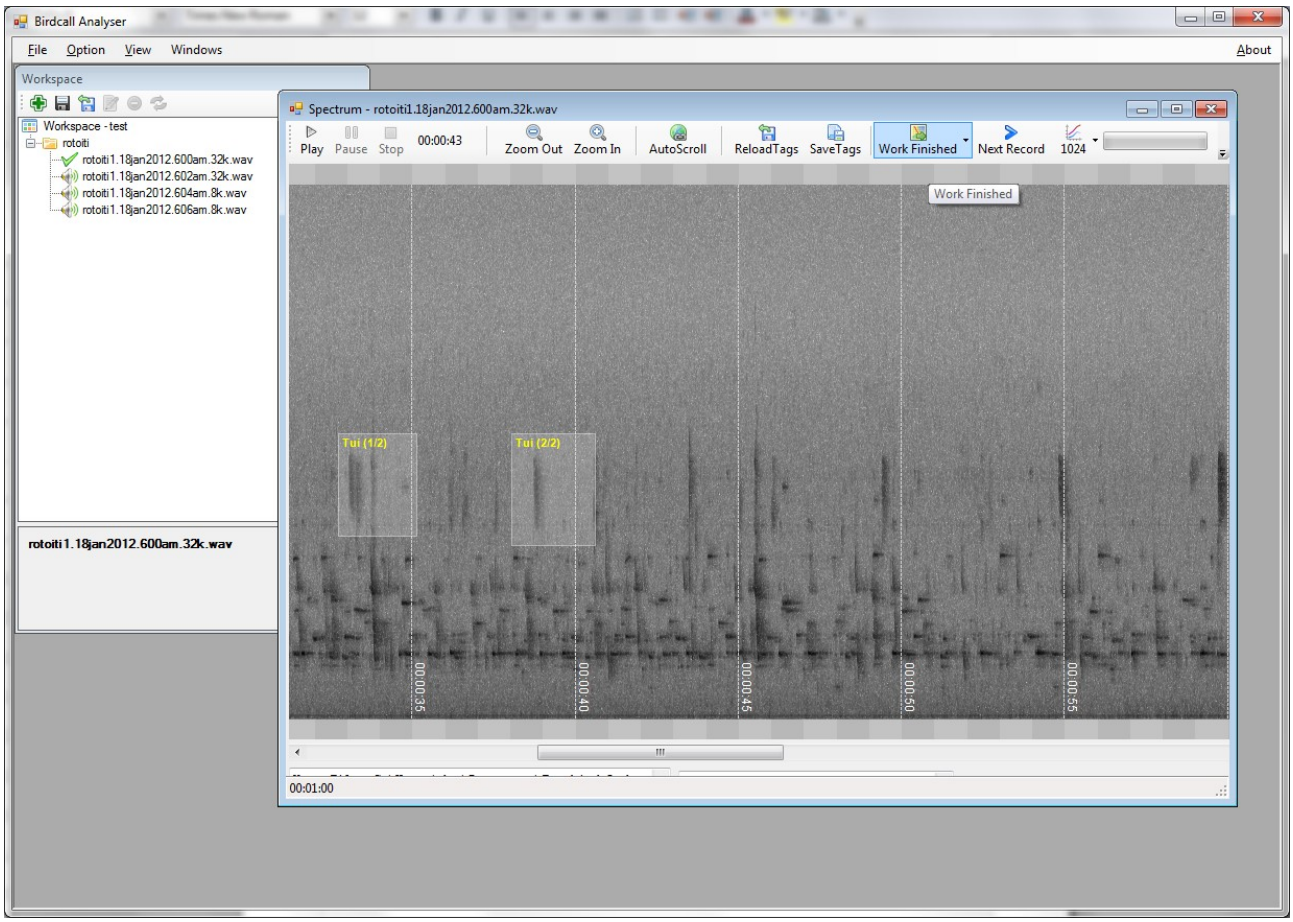
Release the mouse, and the bird list will appear.

Either select the bird from the list using the mouse, or, use the number next to the bird. Using number entry can be faster than the mouse in some circumstances, particulalry if you are just marking a specific birdcall and you know the number.

Once a tag exists, playback controls for that tagged call become live if you mouse over the marked birdcall area.



When you have finished you analysis of the file, click 'save tags', and the lock the record, using the 'finish work' tag. Note that the icon next to the file in the workspace/session window has change to ticked.



Click the 'next record' tab, and the the next file will open up immediately for analysis. A great feature of Birdcall 1 is that the preprocessing of the next spectrogram has been already done in the background, so it is ready immediately for you when you skip through to the next record for analysis.

You can continue to work through all the records in the session in this way, and when you are finished, all the records of the sesssion will have ticks beside them, to show that they are finished.

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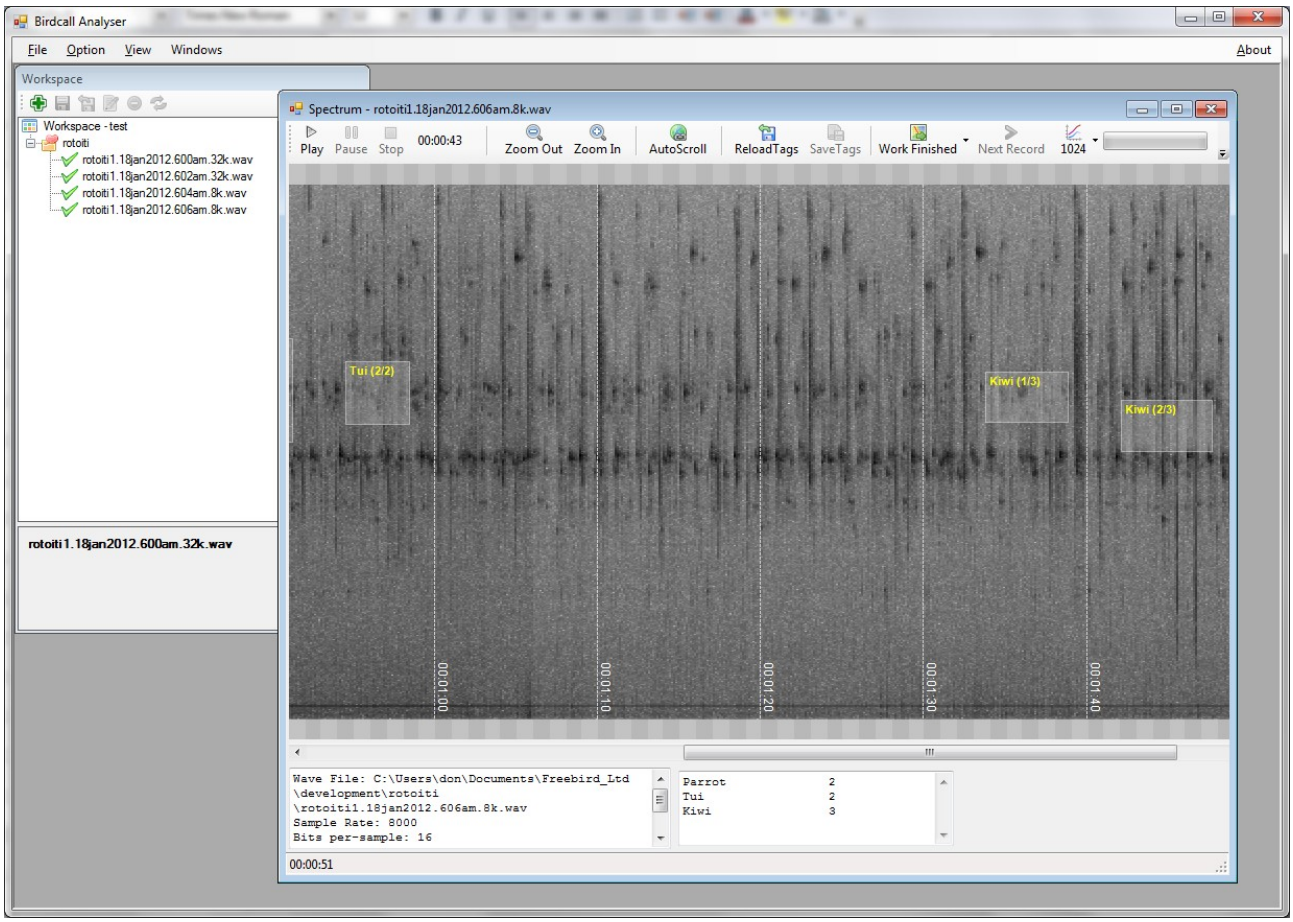

Exporting the intermediate and final results.

In the workspace/session window, you can right click on any record, and select the 'save birdcalls' function. This will save a csv file of the total tally for that record. The filename of the exported file, is that same as the original .wav file, with the suffix .final.csv appended. So it it always clear, which record the results came from.

Note: There is a bug in the original release, in that total session results were also meant to be able to be exported. This has not yet been implemented. Workaround: Use just one session per workspace, and use the workspace totals (as below) to give you a session total.

To save cumulative total for a workspace...first, left click on the workspace name, and then right click. A drop down menu will appear, to save all birdcalls for that session.

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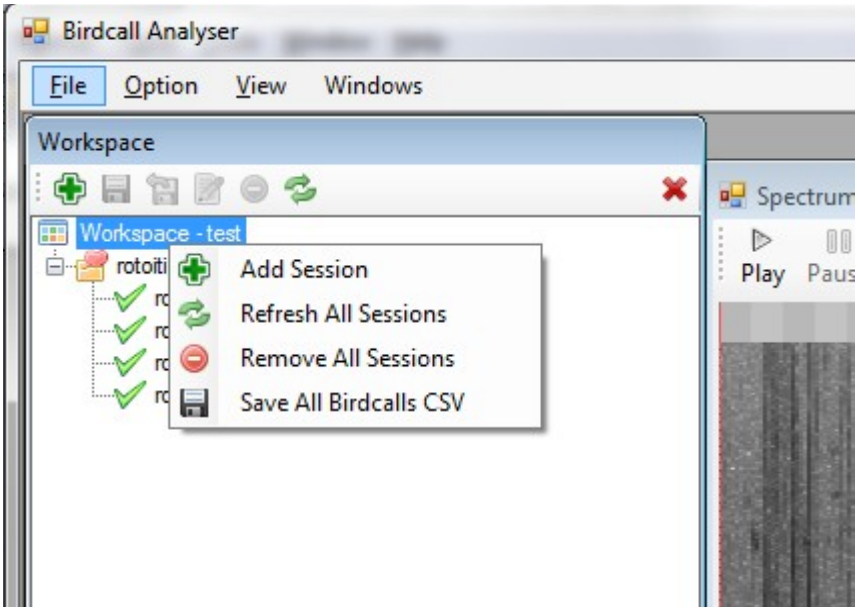

The Bird List

Birdcall 1 uses an externally defined bird list, so that this can be a common file if needed.

The intention is for users to be able to create their own bird list, or import from a csv file of a defined format.

At this date, this functionality is not working correctly, but please contact Freebird Ltd (freebird.co.nz@gmail.com) with your list of birds, and we will build the list for you.

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