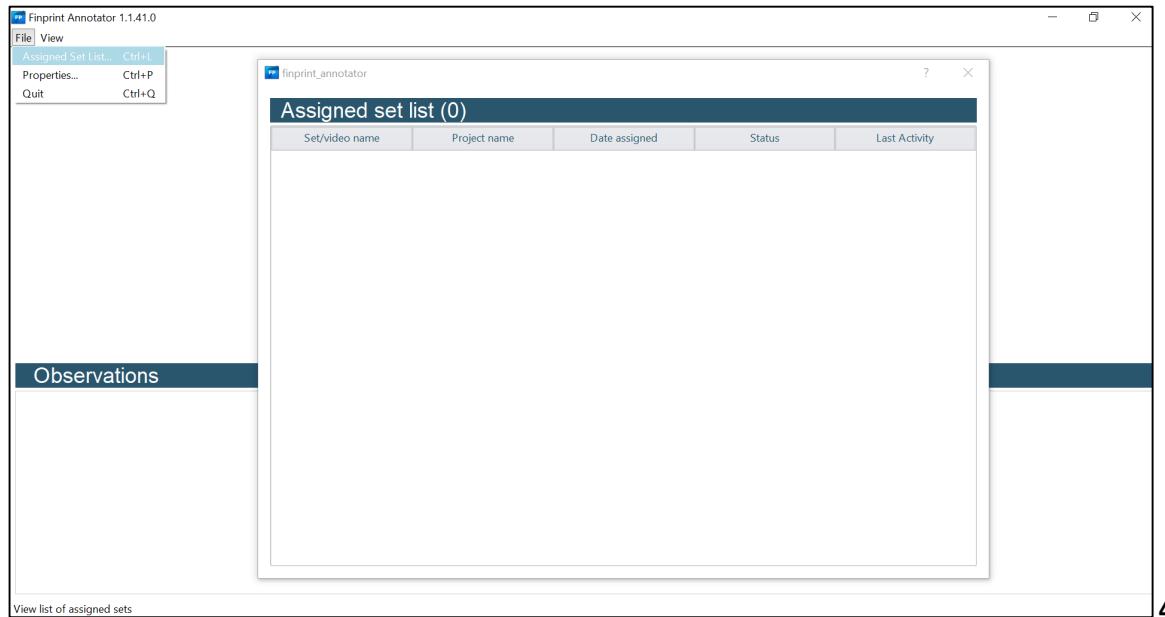


FinPrint Annotator User Guide

Table of Contents

FINPRINT ANNOTATOR USER GUIDE 1

CONTENTS 1



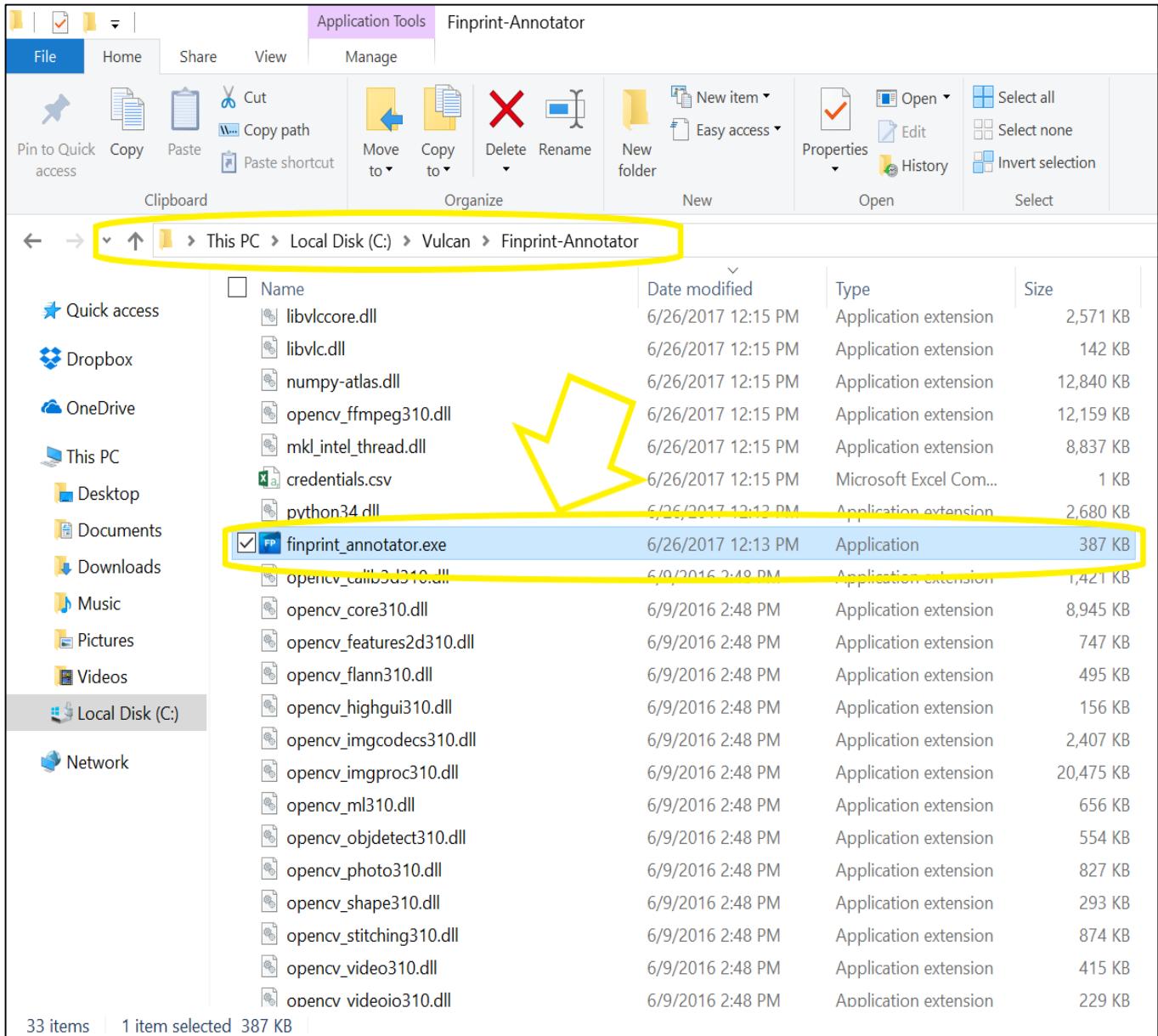
TIME EVENTS (MARK ZERO TIME, MARK 90 MIN TIME, AND MARK HAUL TIME)	14
MAXN	21
ANNOTATION CONTROLS: ADDING EVENTS TO EXISTING OBSERVATIONS	26
TO ASSESS/EDIT OBSERVATION EVENTS	35
CLOSE UNNECESSARY APPLICATIONS	39
SET DISPLAY RESOLUTION	39
SET POWER SAVER	39
DISABLE ANTIVIRUS SCAN	40
DISABLE THE SYNCING SERVICE OF APPLICATIONS SUCH AS DROPBOX, GOOGLE DRIVE, AND MICROSOFT ONEDRIVE	
43	
FOR TECHNICALLY ADVANCED USERS	45
CREATE A “DXDIAG.TXT” FILE	46
CREATE A SCREENSHOT OF TASK MANAGER	48
SHORTCUTS	50
IN-VIDEO SHORTCUTS	50
MOUSE AND ON-SCREEN BUTTONS	50

Contents

<u>GETTING STARTED USING THE ANNOTATOR (SEE ALSO QUICK START P48)</u>	3
<u>OPENING AND WATCHING A VIDEO</u>	5
<u>ERROR LOADING VIDEO</u>	5
<u>MEDIA CONTROLS</u>	7
<u>ANNOTATION CONTROLS: CREATING OBSERVATIONS</u>	14
<u>ANNOTATION CONTROLS: ANIMAL OBSERVATIONS</u>	18
<u>OBSERVATIONS TABLE</u>	27
<u>ANNOTATOR USER GUIDE FOR LEADS/SUPERUSERS</u>	31
<u>TO REVIEW AN ASSIGNMENT (LEADS)</u>	34
<u>ACCEPTING/REJECTING ASSIGNMENTS (LEADS)</u>	38
<u>ANNOTATOR SETUP AND TROUBLESHOOTING</u>	39
<u>ADDITIONAL TROUBLESHOOTING: SENDING COMPUTER INFO TO YOUR LEAD</u>	45
<u>QUICK START MEDIA CONTROLS AND KEY</u>	50

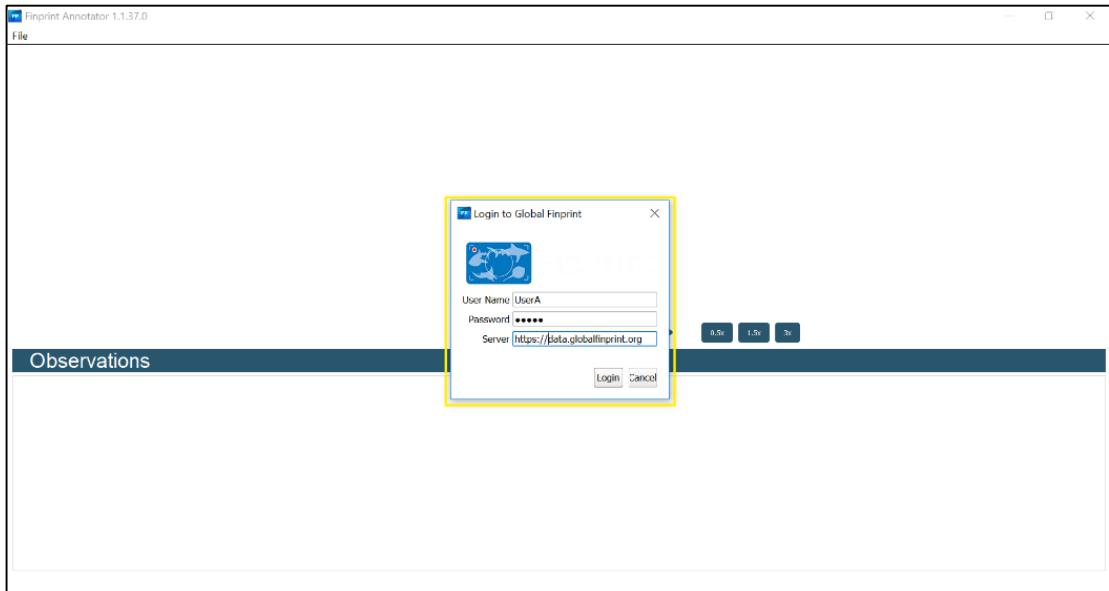
Getting started using the Annotator

To start the Annotator, open the Vulcan folder on the computer. If you have used the default settings during installation, the path will look something like this:

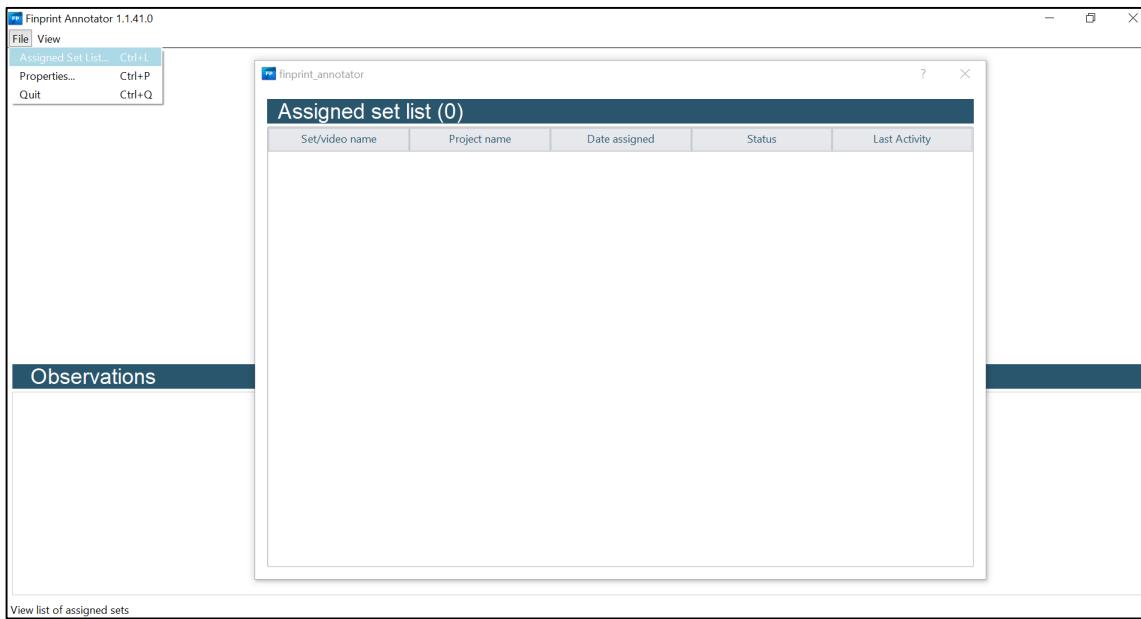


Double-click on the **fingerprint_annotator.exe** file (marked, above) to launch the application.

Enter your login credentials in the highlighted area. Note that both the User Name and Password are case sensitive.



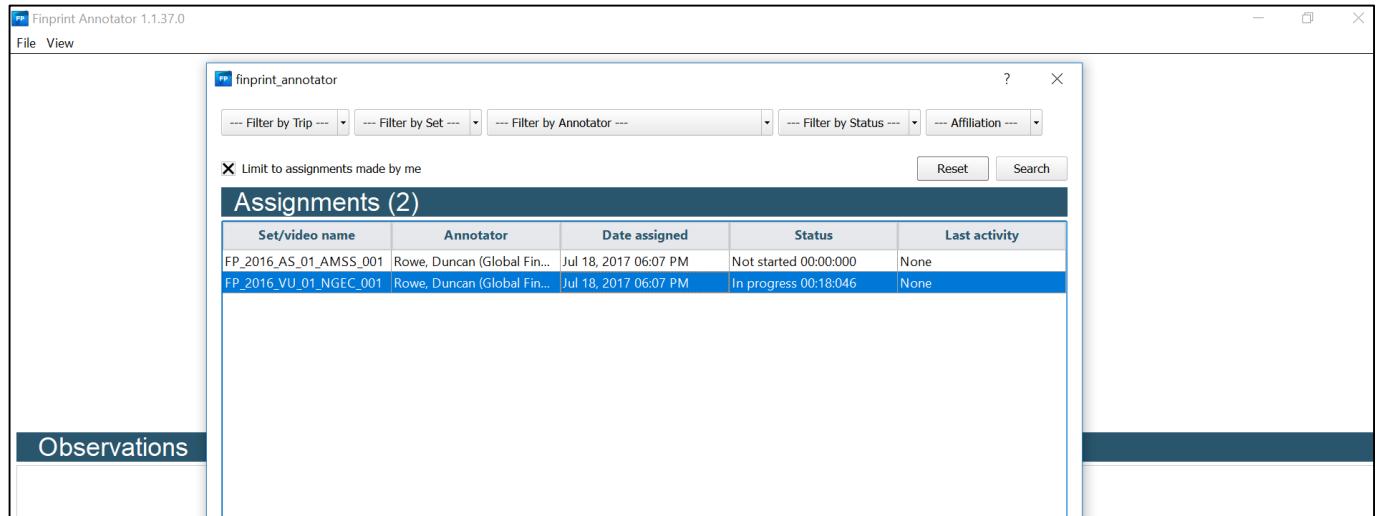
When you first log in you will see a pop-up screen showing your current list of assigned videos. You can access this list at any time by going to the '[File → Assigned Set List](#)' menu option, or using the **CTRL+L** shortcut key.



If your assignment list is empty, please contact your Lead, who will assign you videos to annotate. **Leads and Superusers will see a different version of the assignment list pop-up. See Page 29 or click [HERE](#) to see the assignment list for Leads and Superusers.

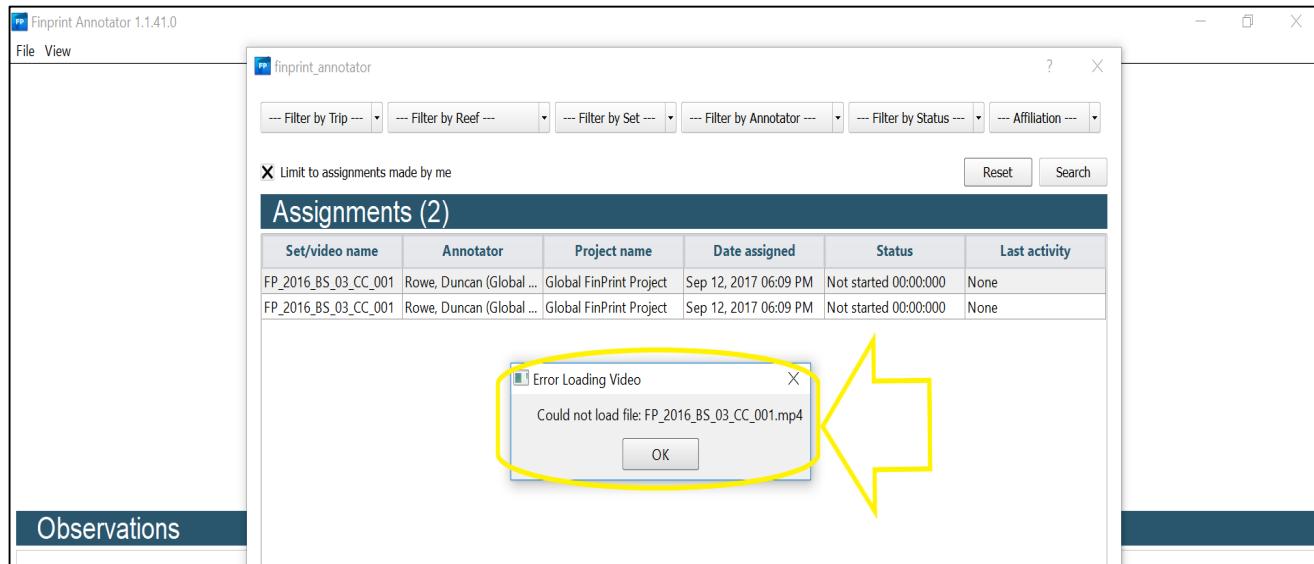
Opening and watching a video

Double-click on a specific video assignment to open it. This will open the video, but not begin playback.



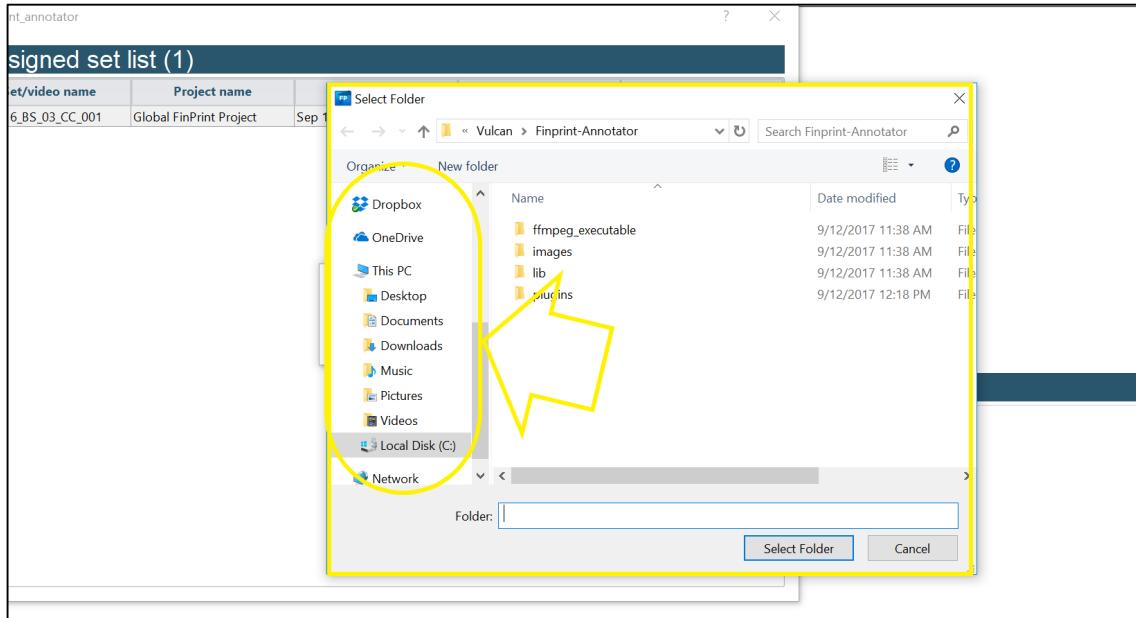
Error Loading Video

If you see the 'Error Loading Video' message below, it most likely means the video file for the assignment is not in the location specified in the File->Properties menu item:

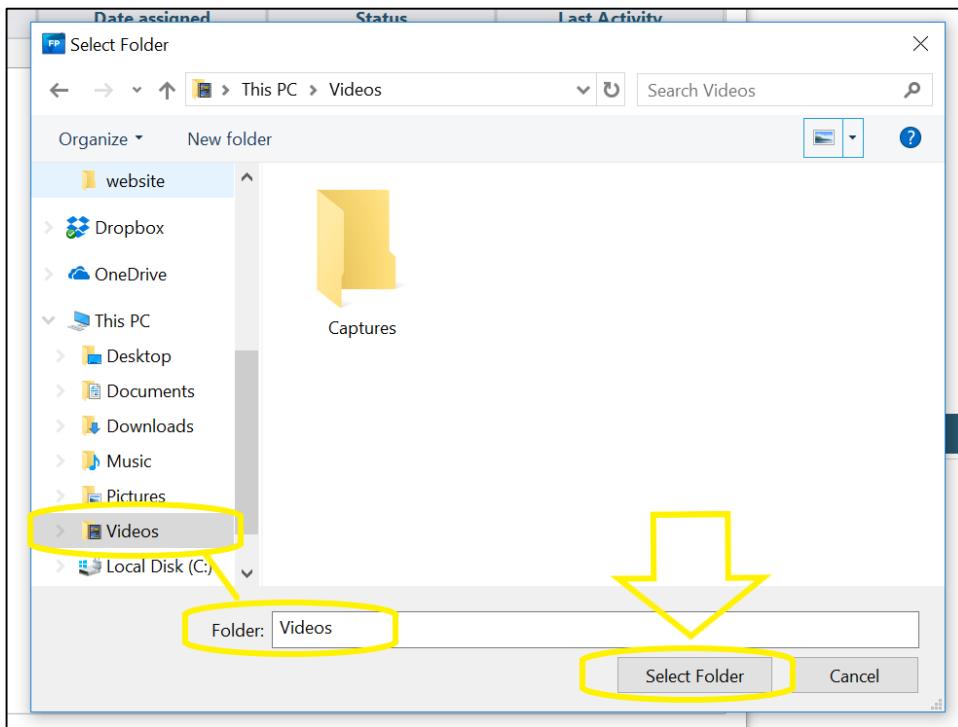


To resolve, this, you can either locate the video file and move it to the location specified in the File->Properties setting, or you can change the File->Properties setting to point to the file path that the video file is located in.

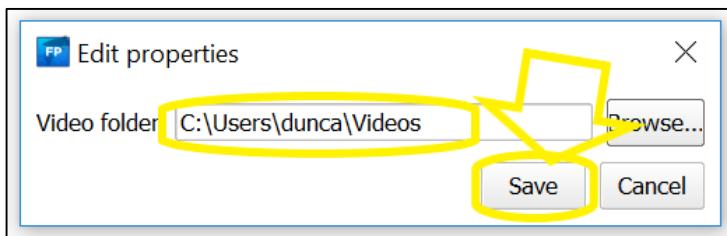
To do the latter, click on File->Properties and then click on '[Browse...](#)'. A 'Select Folder' window will open. Locate the folder where your video is stored using the navigation bar on the left-hand side.



When you have identified the correct folder, click once on it. It will be added to the 'Folder' location box. In the example shown below, the video has been uploaded onto the User's hard drive, into the 'Videos' folder.



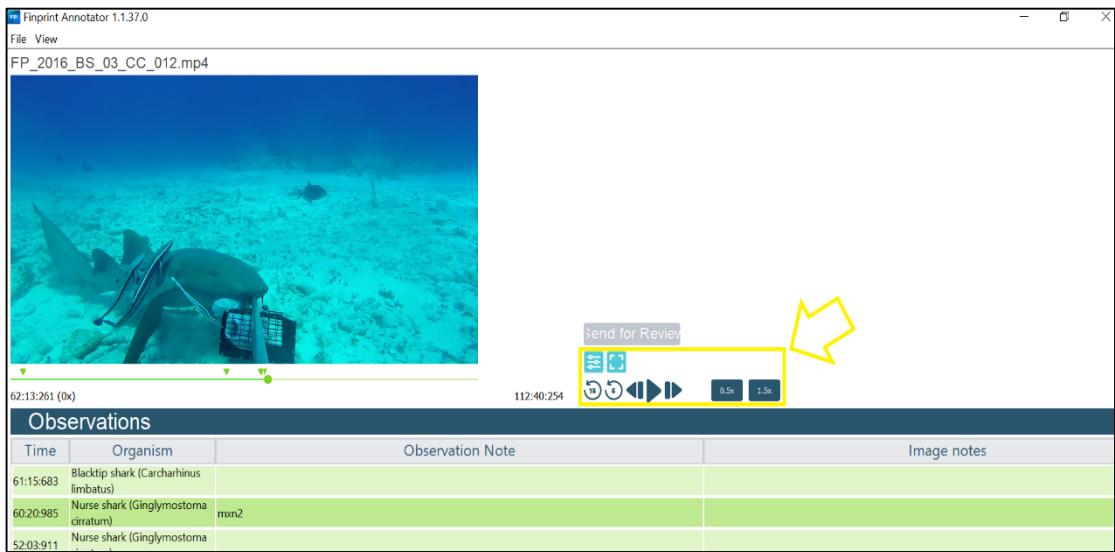
Click on 'Select Folder' to proceed. Note that the correct video file location is now displayed in the 'Edit properties' box. Click on 'Save'.



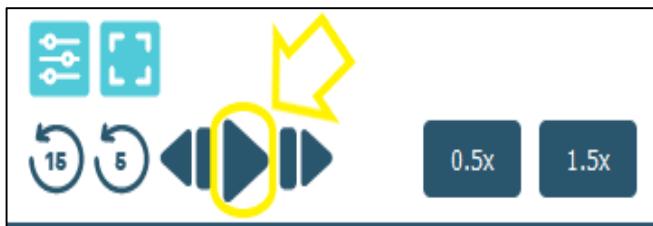
You should now be able to open and play the video assignment by double clicking it in the 'Assigned Set List' window (**CTRL-L**).

Media Controls

To begin video playback, use the Media Controls, **highlighted below**.



To start playing the video, click '**Play**'.

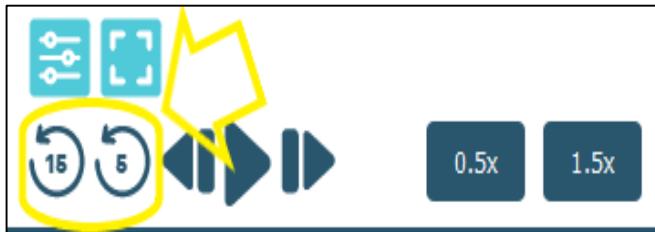


To pause the video at any time during playback, click '**Pause**'.



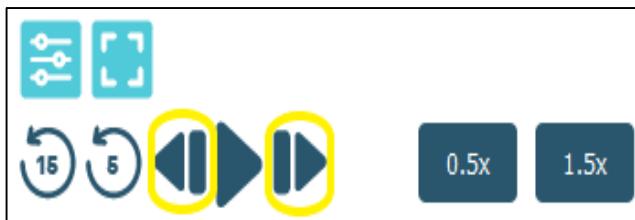
You can also use the **SPACE BAR** as a shortcut key for playing and pausing the video.

Clicking either the '**15s**' or '**5s**' rewind buttons will stop playback and rewind the video by the selected time. You can click these multiple times, to rewind by values of 5 or 15 seconds each time.

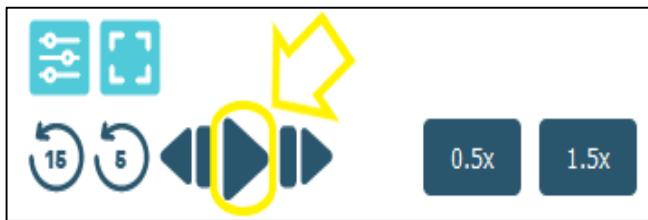


Alternatively, you can use **CTRL↓** (Control + down arrow) to rewind by 15s and **CTRL←** (Control + left arrow) to rewind by 5s.

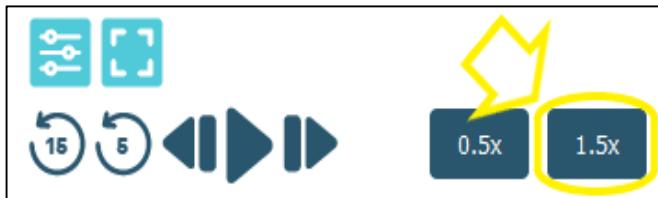
You can also move backwards or forwards by one frame at a time, using the '[Advance/Rewind frame](#)' buttons marked below, or the shortcuts **SHIFT→** and **SHIFT←**.



To resume normal playback, click '[Play](#)'.



Click the '[1.5x speed](#)' button to view playback at a rate 1.5 times faster than normal speed.

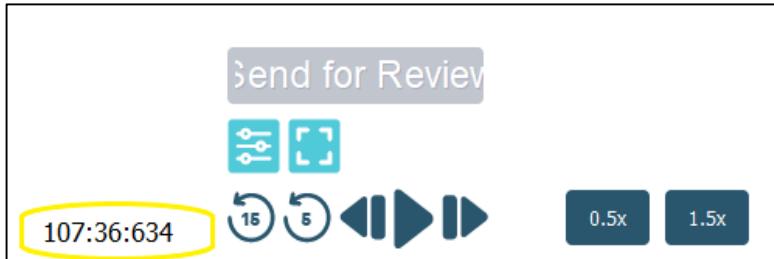


Click the '[Half-speed](#)' button to view playback at half the normal speed.

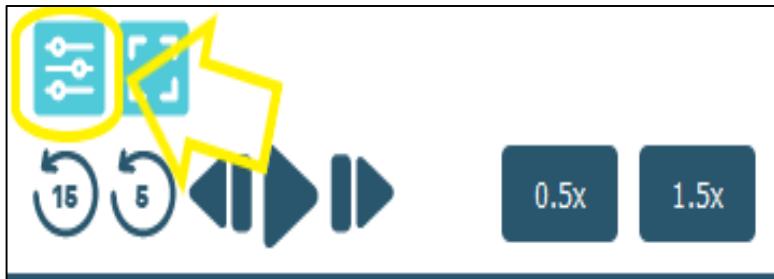


After using the 0.5x or 1.5x buttons, click ‘[Pause](#)’ then ‘[Play](#)’ to resume viewing in normal time, or use the **SPACE BAR** shortcut.

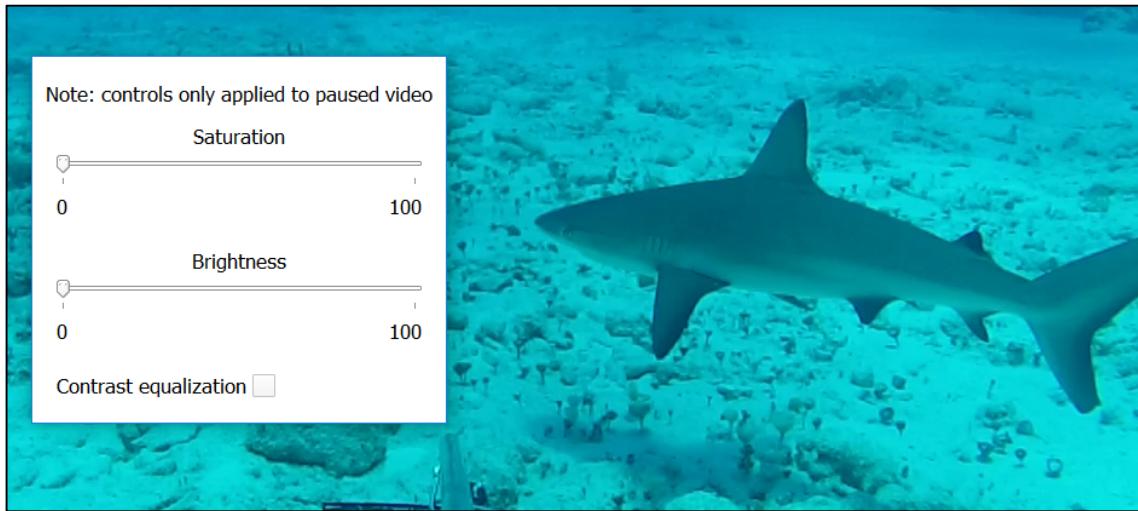
The total duration of the video is shown here.



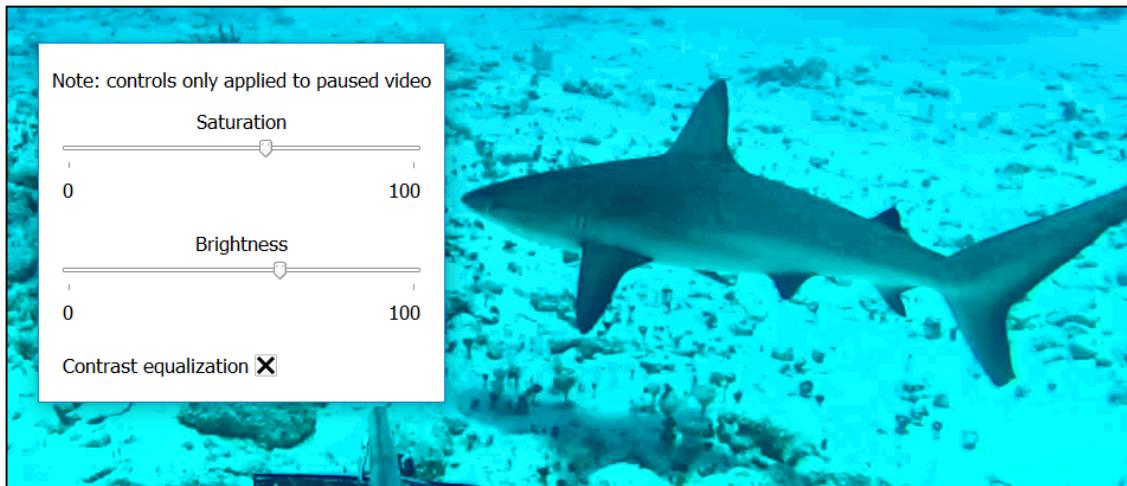
You can adjust the picture quality when the video is paused by clicking on the ‘[Contrast menu](#)’ button. Note: *You will only see the video quality adjustments applied while the video is paused.*



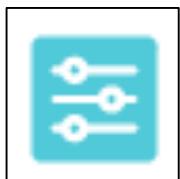
A pop-up menu will appear (see below)

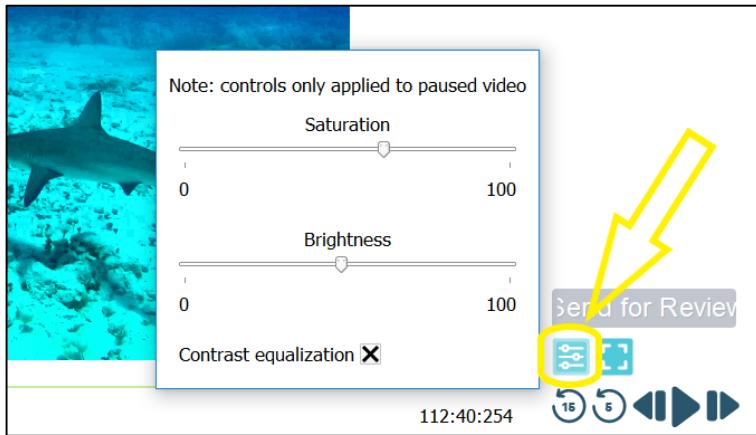


Adjust Saturation and Brightness as needed, using the sliders. Click on '[Contrast equalization](#)' to turn the function on or off.

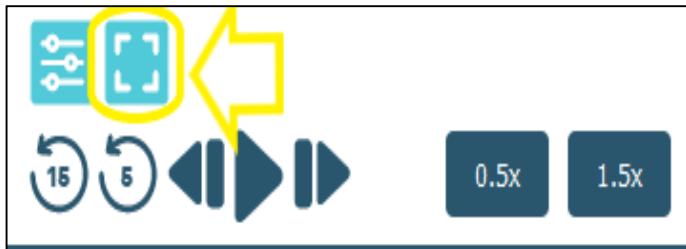


To exit the Contrast menu, click the same button used to open it:



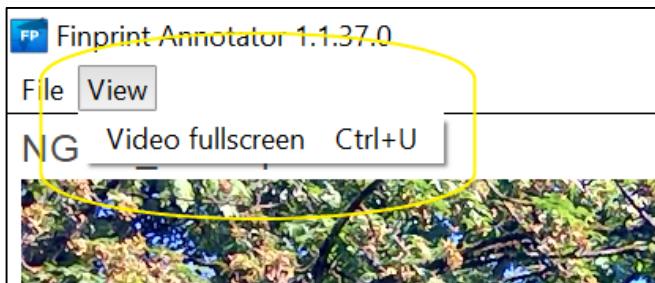


To view the video in full-screen mode click the '[Video fullscreen](#)' button.

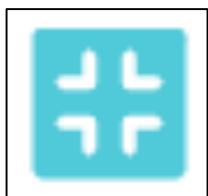


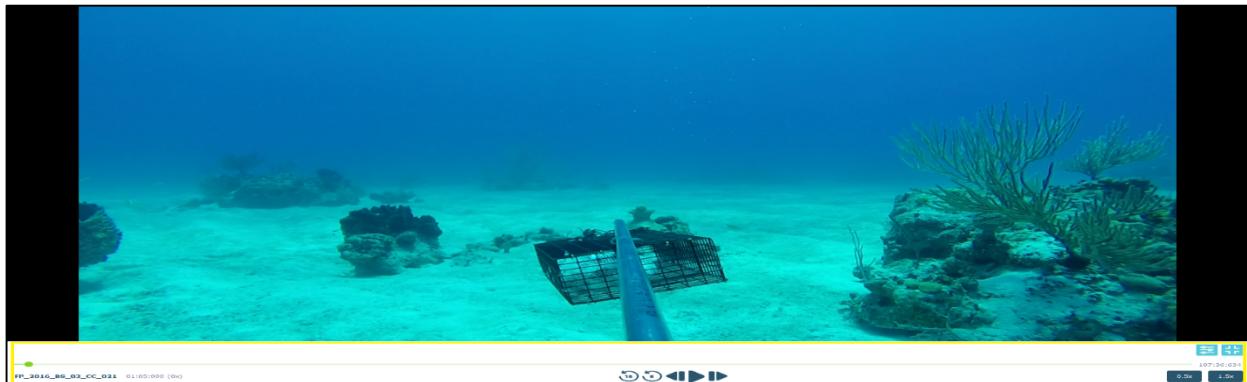
Note that playback will pause when switching between fullscreen mode and back, and you will need to click '[Play](#)' again to resume viewing.

You can also use the **CTRL-U** shortcut key or click on '[Video fullscreen](#)' in the View menu to enter or exit fullscreen mode.

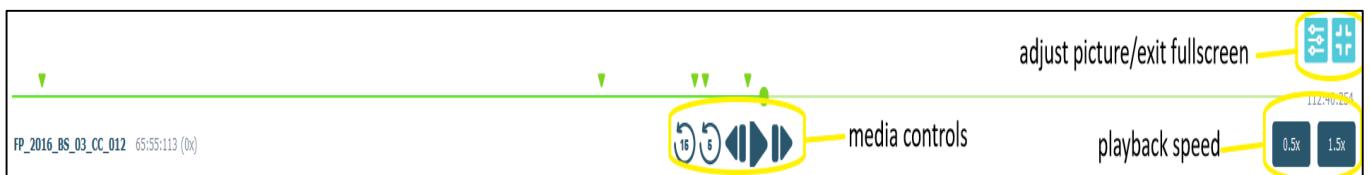


To exit full-screen mode at any time, press **ESC**. You can also click again on the '[Video fullscreen](#)' button on the right of the in-video navigation menu.





The in-video navigation menu (above/below) is available in normal or full-screen mode. Note that clicking on the video screen will NOT pause or restart playback. You must use the navigation controls, or the space bar.



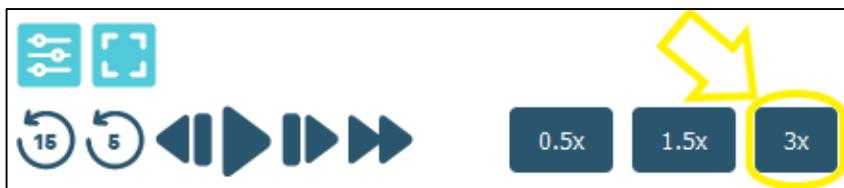
You can also manually adjust the time slider to any point in the video.



Drag the slider to your chosen time. Press 'Play' to resume playback.

NOTE: You can use the video slider to rapidly find the point at which the BRUV has settled on the ocean floor in order to capture the MARK ZERO TIME. Once the MARK ZERO TIME has been set, you cannot use the slider to advance the video past the point you've watched the video in normal playback mode.

***Leads and SuperUsers can use the time slider to advance to any point in the video. Additionally, a further 3x playback speed is available for their use:*



Annotation controls: Creating Observations

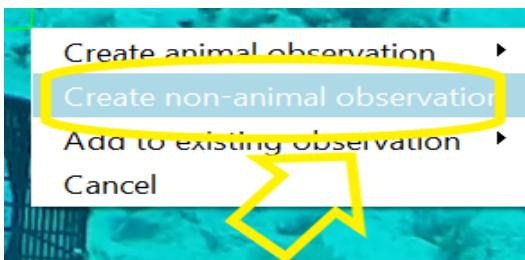
Time Events (MARK ZERO TIME, MARK 90 MIN TIME, and MARK HAUL TIME)

The first observation you create must be the MARK ZERO TIME. You can use the video slider to advance to the point at which the BRUV has settled on the ocean floor to capture the MARK ZERO TIME.

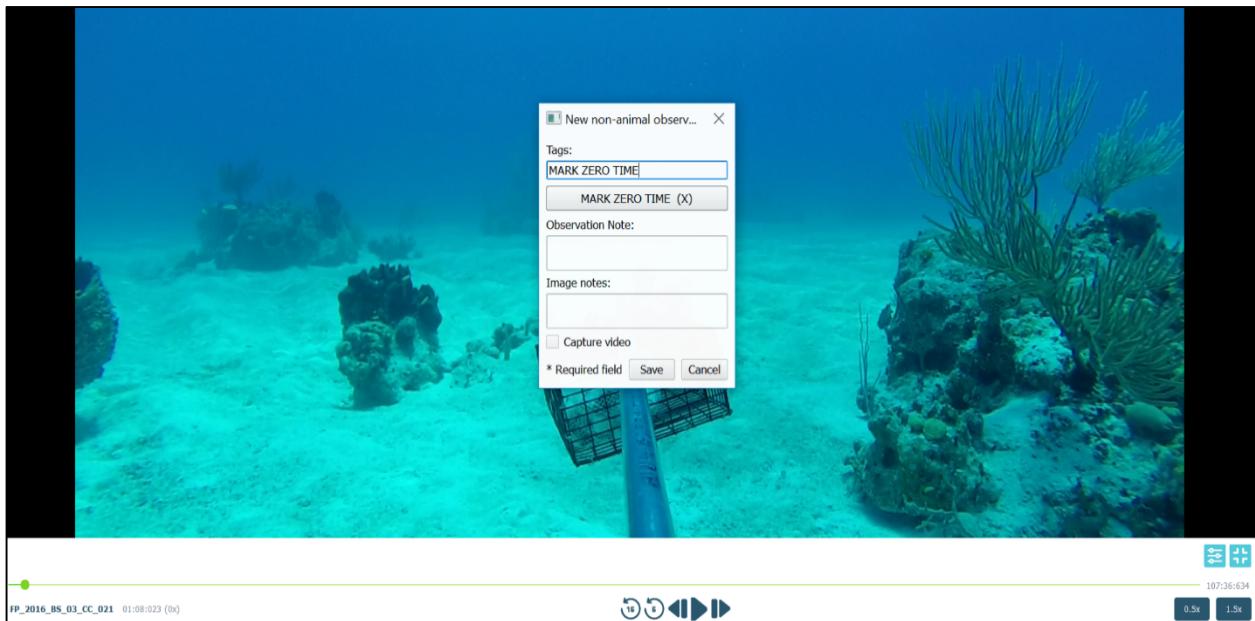
Click-and-drag to frame the entire video screen with either mouse button, to create a rectangle on the screen, which results in a menu appearing (bottom-right, below).



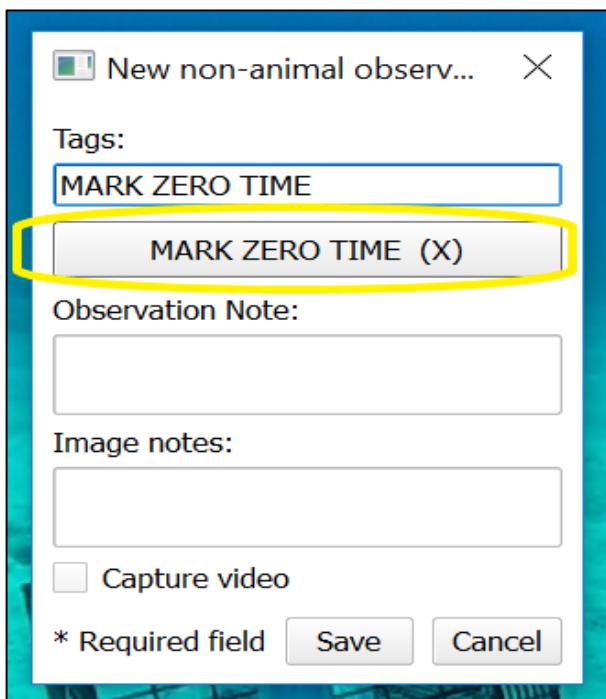
Select 'Create non-animal observation' ...



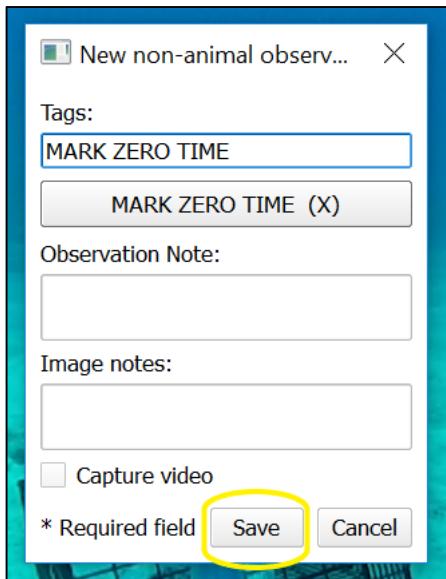
...and a pop-up window will appear.



You'll notice the "Tags:" field is automatically populated with the MARK ZERO TIME tag. Tags are pre-defined by project leads to provide a way to consistently identify specific types of observations, events, and behaviors across a project. Your lead can provide guidelines on what additional types of Tags you should be using.



If applicable, enter any pertinent Observation or Image notes, then click ‘Save’ to progress.

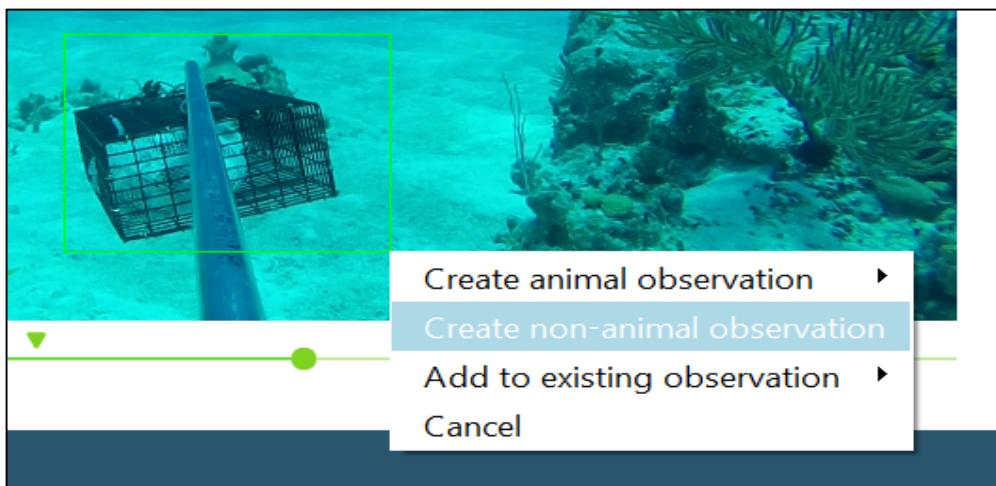


There are two other time-related observations that your lead may require you to mark for each video set – MARK 90 MIN TIME and MARK HAUL TIME.

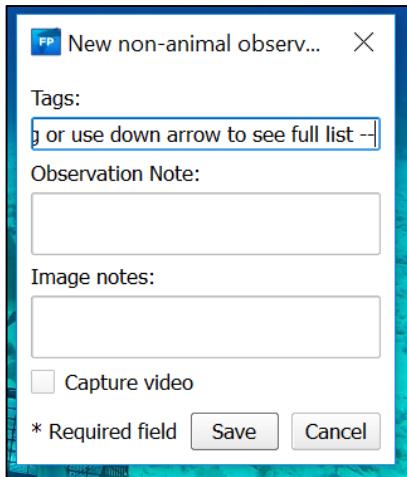
The MARK 90 MIN TIME is set at the point in the video where you've watched 90 minutes of video from the point of the MARK HAUL TIME.

The MARK HAUL TIME is set at the point in the video when the BRUV is raised up off the ocean floor back to the boat.

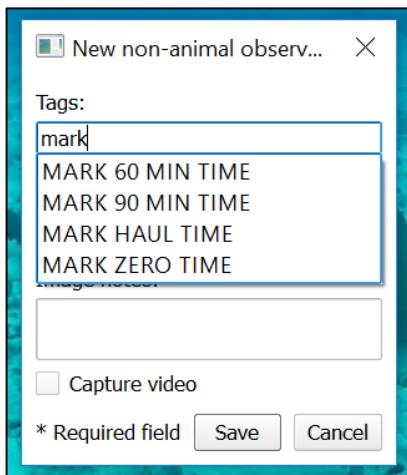
To set one of these observations, pause playback and click-and-drag open a new rectangle and select ‘Create non-animal observation’.



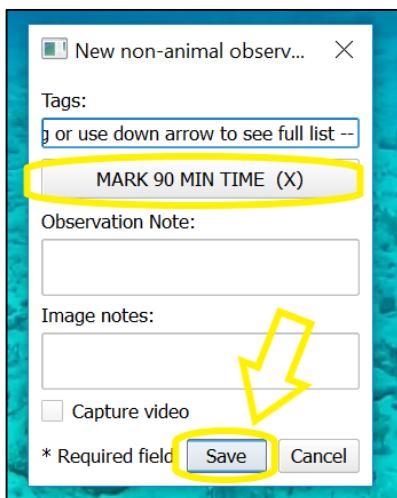
The ‘New non-animal observation’ window will pop up.



Type ‘mark’ into the ‘Tags’ box or use the drop-down menu to find the ‘MARK x TIME’ Tags.

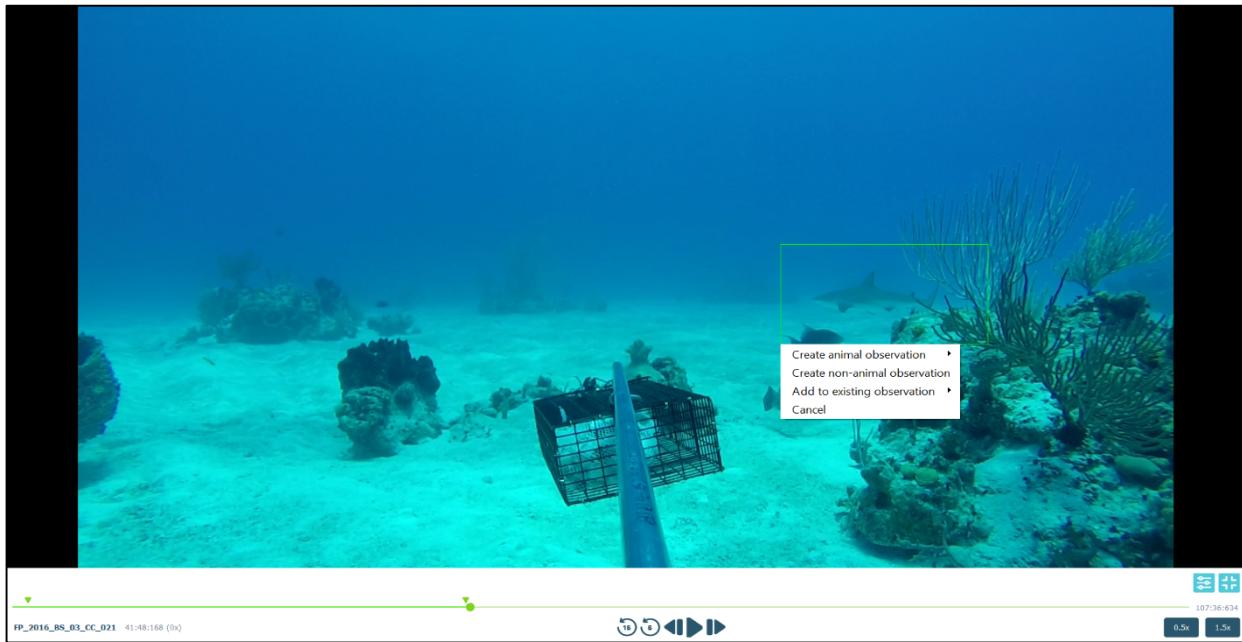


Select the relevant Time Event Tag and enter any Observation or Image notes, then click ‘Save’.



Annotation controls: Animal observations

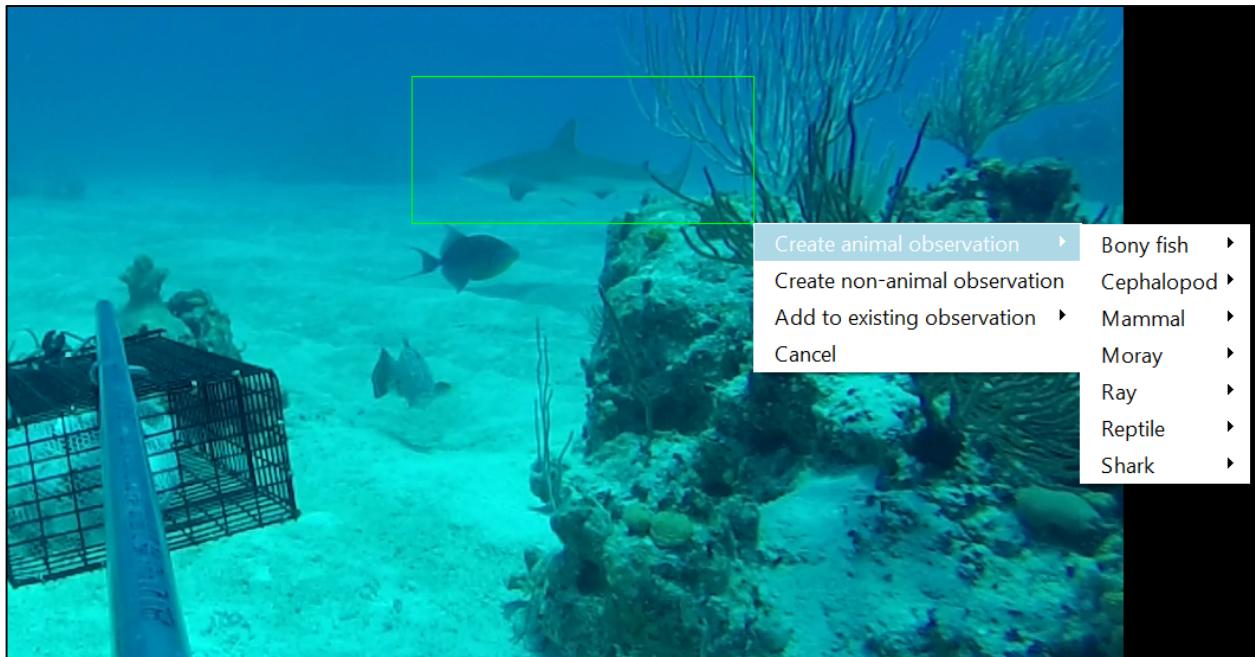
To record an animal observation, first 'Pause' playback. Drag a frame around the animal and the observation menu will appear.



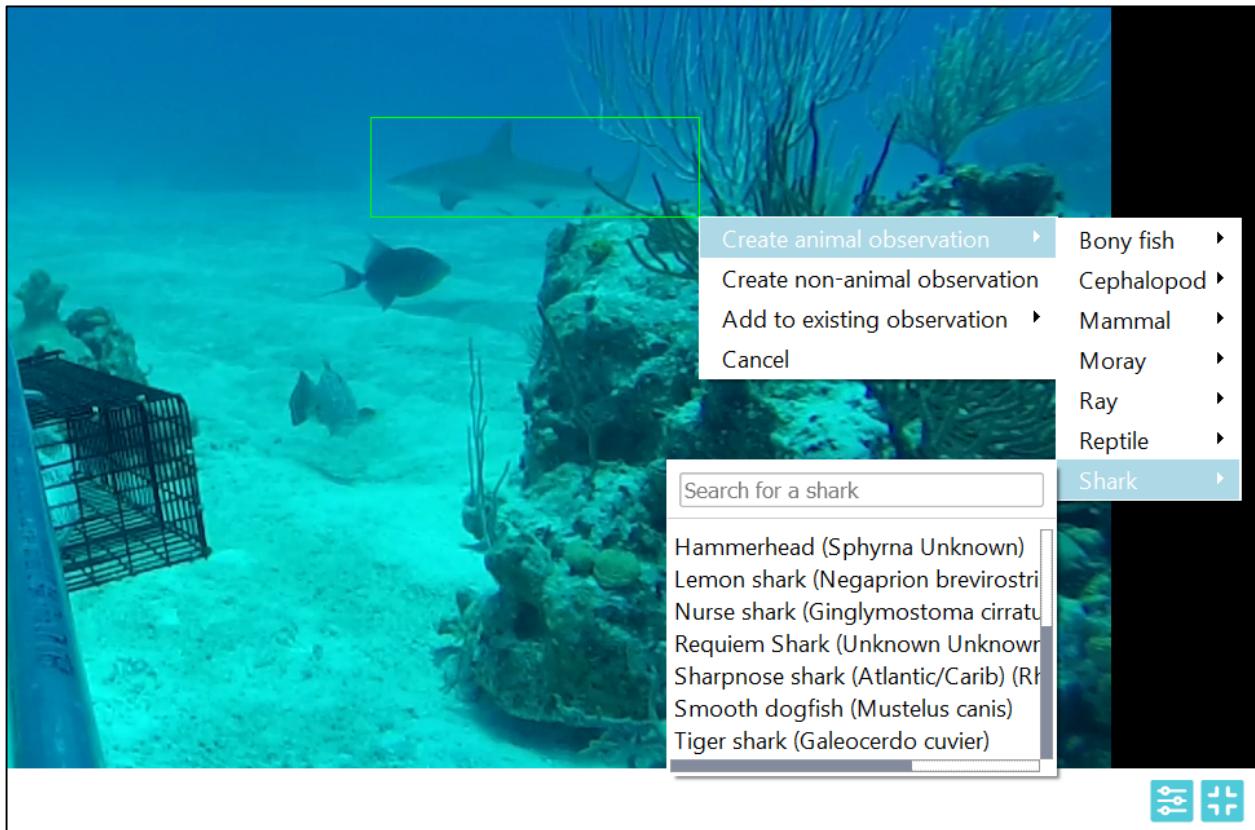
Try to keep the frame around individual animals. In the image below two animals are framed.



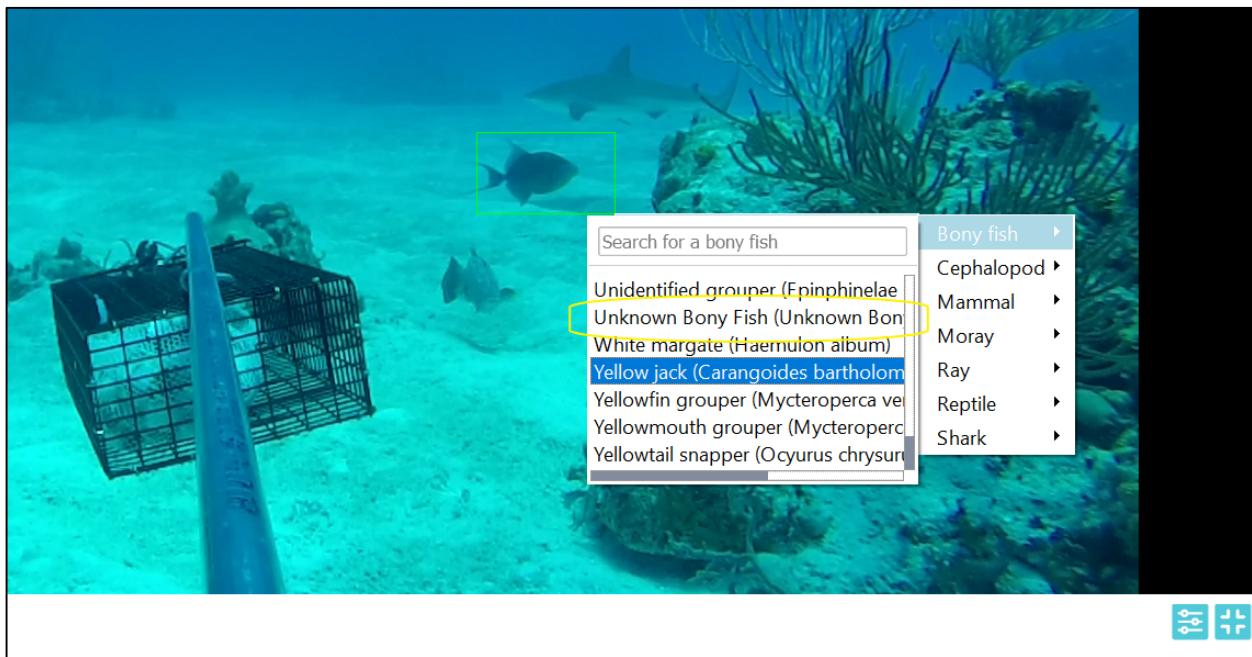
This image is better framed.



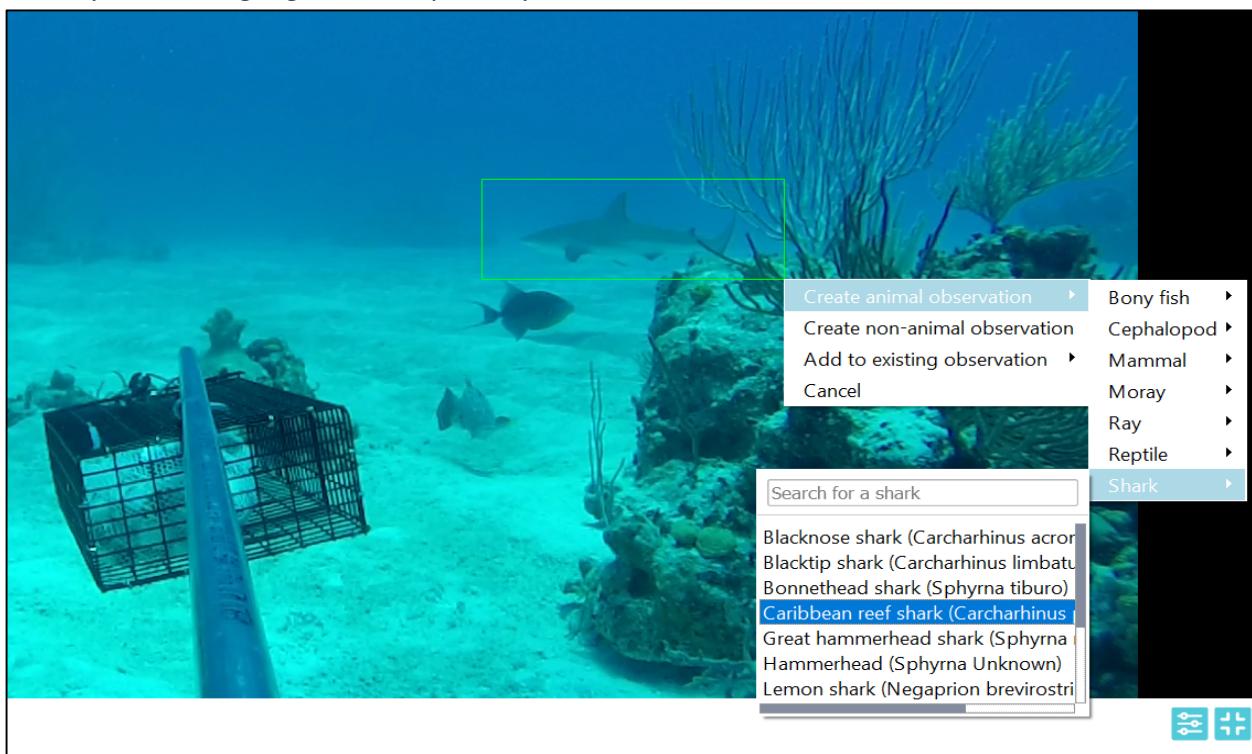
Hover over 'Create animal observation' and an expanded list will pop up (see above). Hover over the relevant category list and the species list will pop up (see below).



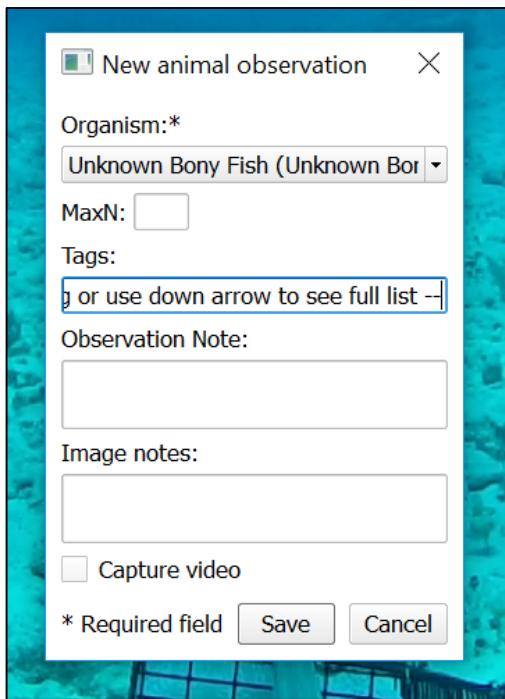
Scroll up or down the list to select the relevant species or type any part of the species name in the search box to narrow down the list of species to choose from. If you are unsure of the species, make the observation anyway – you can choose one of the “Unknown...” options or make changes to your observations later. You can also add an Observation or Image note if you are unsure if you’ve identified the species correctly.



When you have highlighted the species you want to select, **double-click** it.

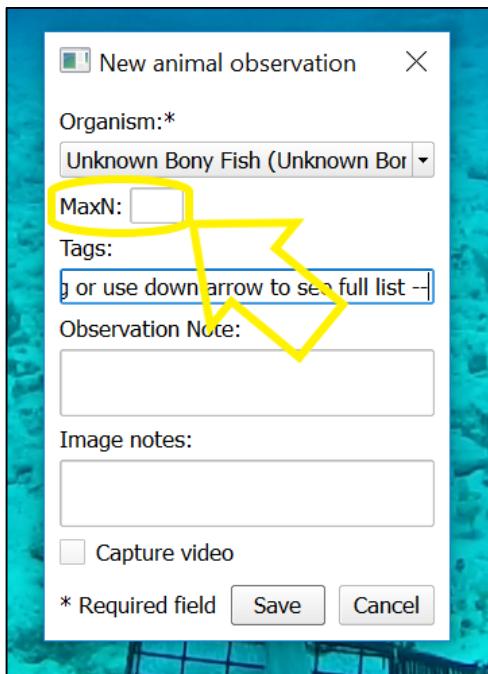


The ‘New animal observation’ tab will appear.



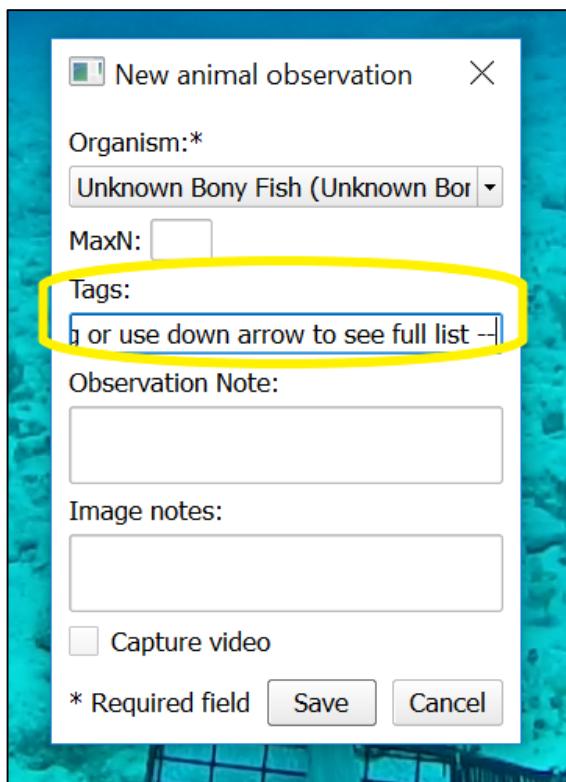
MaxN

You'll notice just below the Organism name is a field called “MaxN”, which is a very important type of observation you'll need to make for each unique species of shark and ray that you see in a specific video.



“MaxN” is short for “maximum number” and each time you see a new maximum number of animals of a specific species in the same video frame, you’ll need to record an observation with a new “MaxN” value. So, for example, the first time you see a single Blacktip shark in a given video, you’ll want to create an observation for it and specify a value of “1” in the MaxN field. If during the same video, you see two (or more) Blacktip sharks at the same time in the video, you’ll want to create a new observation and specify a new MaxN value that indicates how many Blacktip sharks you see. If, later in the video you see more than the previous MaxN value Blacktip sharks at the same time, then you create a new observation with the new, higher MaxN value. You’ll notice when you specify a value in the MaxN field, that the MaxN Tag is automatically added as well.

If this is the *first appearance* of a new animal, you also need to tag it as such. Click in the ‘Tags’ field.



Start typing in “first” and you’ll see the ‘Image Frame tags – First appearance of organism’ Tag appear (below).

New animal observation

Organism:*

Blacktip shark (Carcharhinus limbæ)

MaxN: 2

Tags:

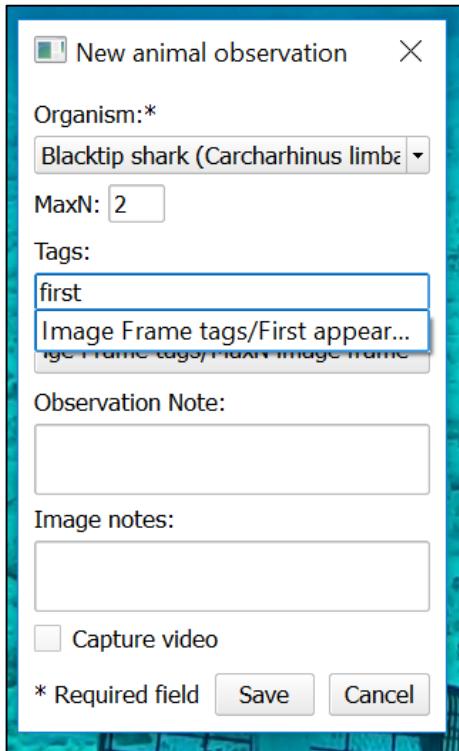
first
Image Frame tags/First appear...

Observation Note:

Image notes:

Capture video

* Required field **Save** **Cancel**



Click ONCE to select the Tag. It will be added just below.

New animal observation

Organism:*

Blacktip shark (Carcharhinus limbæ)

MaxN: 2

Tags:

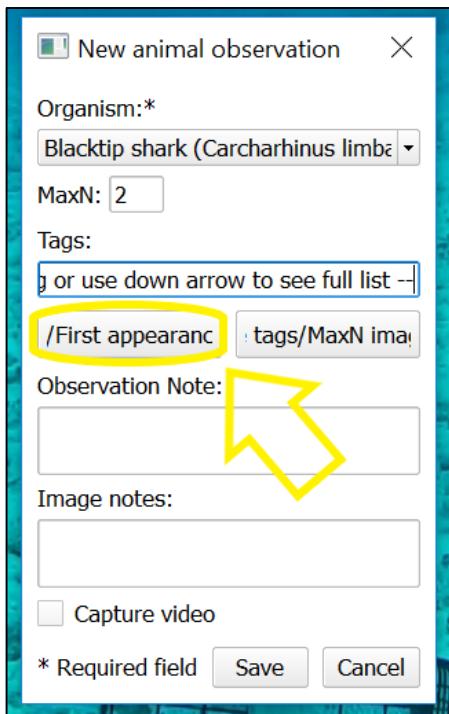
[or use down arrow to see full list --]
/First appearanc tags/MaxN ima

Observation Note:

Image notes:

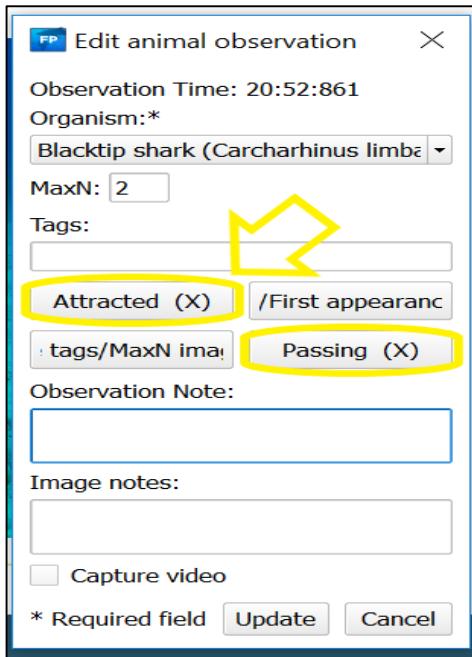
Capture video

* Required field **Save** **Cancel**



You can add further Tags at this time by following the same process. If you want to remove a Tag for any reason, click on it in the field where it is displayed.

For example, in the observation below both 'Attracted' and 'Passing' Tags, which are mutually exclusive, have been applied. Click once on the Tag you want to remove, in this case 'Attracted'.



FP Edit animal observation

Observation Time: 20:52:861

Organism:*

Blacktip shark (Carcharhinus limbæ)

MaxN: 2

Tags:

Attracted (X) /First appearanc

tags/MaxN ima Passing (X)

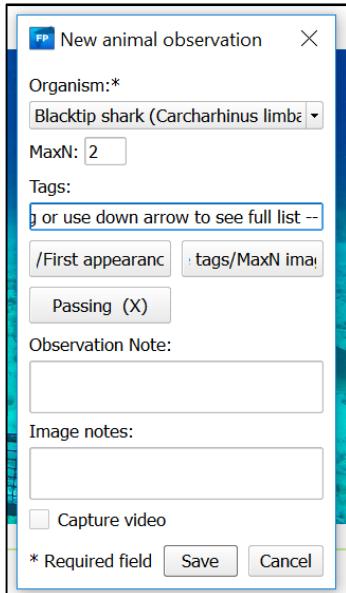
Observation Note:

Image notes:

Capture video

* Required field

Note that the 'Attracted' tag has been un-applied.



FP New animal observation

Organism:*

Blacktip shark (Carcharhinus limbæ)

MaxN: 2

Tags:

[or use down arrow to see full list --] /First appearanc tags/MaxN ima

Passing (X)

Observation Note:

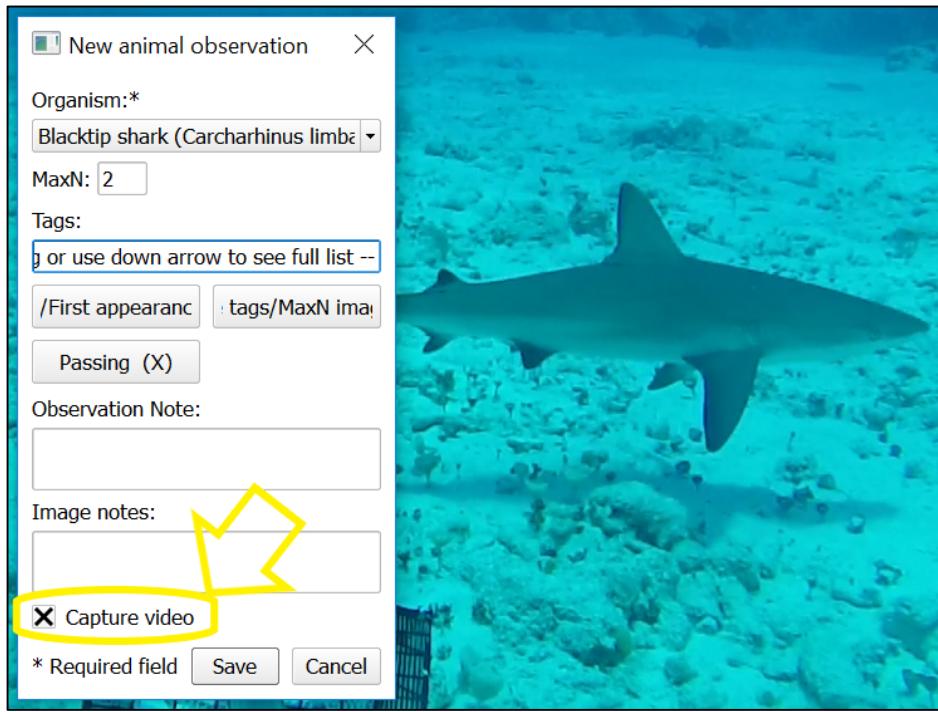
Image notes:

Capture video

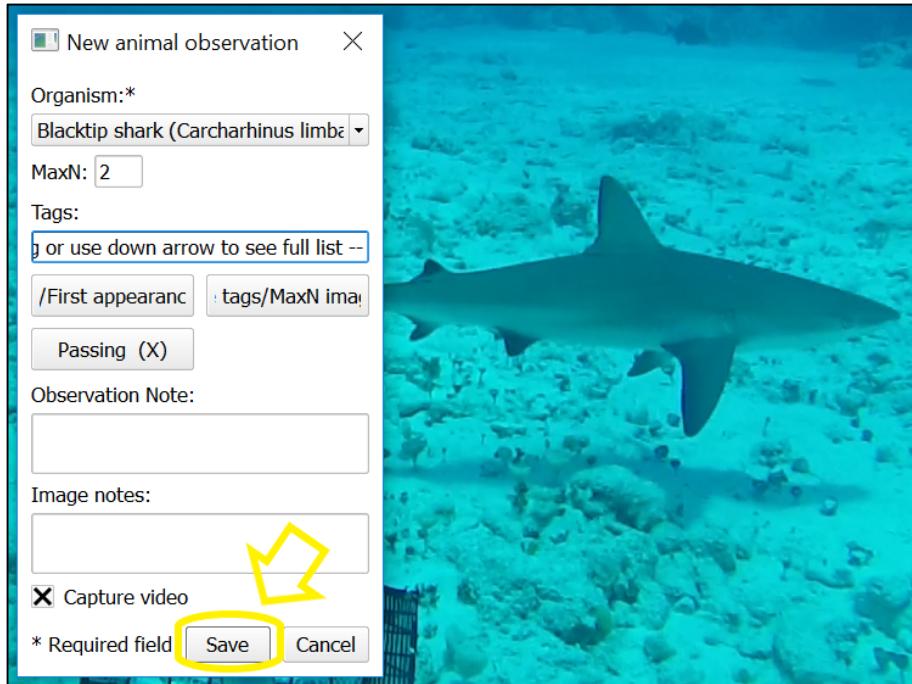
* Required field

Before you save, you can also add any observation or image notes that you feel relevant. You can also add a short (8-second) video clip by selecting '[Capture video](#)'.

Your lead can provide guidance on when to include a video clip, but typically you would do so if you're unsure of the species and want to capture the video clip for your lead to see when reviewing your observations.



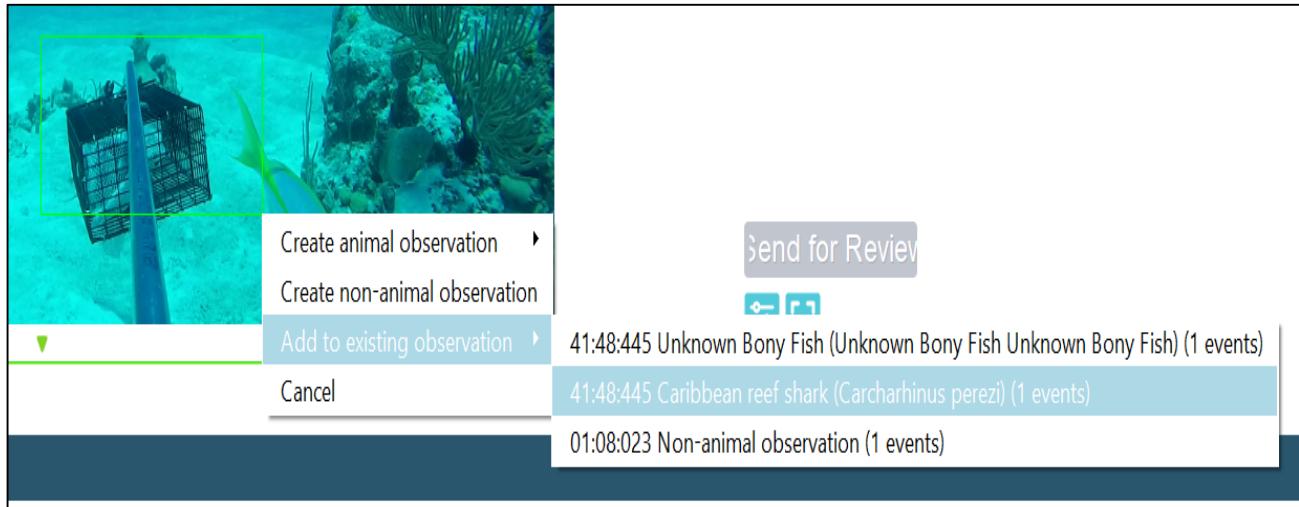
When you have filled out all the relevant information, click on '**Save**' to record your observation.



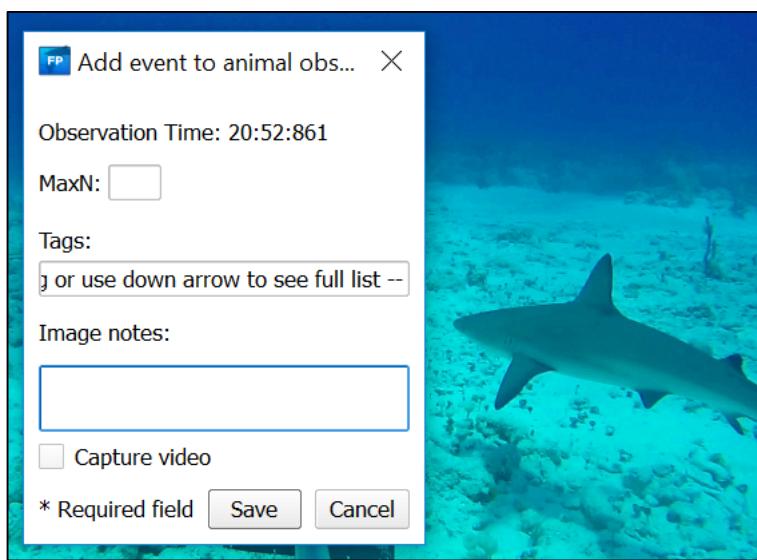
Annotation controls: Adding events to existing observations

In Annotator, each observation you create is also considered an “event”. Most observations you create will likely be a single event. But there may be times where you want to add additional observation “events” to an existing observation for the same animal.

To add an additional observation event to an existing observation, after drawing an extent rectangle, hover over ‘[Add to existing observation](#)’ from the pop-up menu and then hover over the existing observation you want to add an event to and click to select it.



The ‘Add event to animal observation’ window will pop up.



After making your changes, click ‘[Save](#)’.

Observations table

As you create new observations, you will notice that they appear in normal screen mode in the Observations table. You can edit previously-made observations from this table without needing to go to the specific location of an observation in the video.

Time	Organism	Tags	MaxN	Observation Note
21:06:637	Blacktip shark (Carcharhinus limbatus)	MaxN image frame	1	
20:52:861	Blacktip shark (Carcharhinus limbatus)	First appearance of organism, MaxN image frame, Passing	2	
02:20:216		MARK ZERO TIME		

For example, if you make a mistake while setting the ZERO TIME you can delete the observation by right-clicking on the observation and selecting ‘Delete -> This entire observation.’ (Note that if you delete the MARK ZERO TIME observation, you must then make a new ZERO TIME observation to continue making observations.)

Time	Organism	Tags	MaxN	Observation Note
21:06:637	Blacktip shark (Carcharhinus limbatus)	MaxN image frame	1	
20:52:861	Blacktip shark (Carcharhinus limbatus)	First appearance of organism, MaxN image frame, Passing	2	
02:20:216		MARK ZERO TIME		

Double-clicking an observation in any field will open the ‘Edit animal/non-animal observation’ control tab (below).

The screenshot shows the iNaturalist mobile app interface. At the top, there's a video preview of a shark swimming near a cage. Below it is a timeline with a green marker at '20:39:569 (0x)'. To the right is an 'Edit animal observation' dialog box. The 'Observation Time' field is highlighted with a yellow circle and contains the value '20:52:861'. The 'Organism' dropdown is set to 'Blacktip shark (Carcharhinus limbatus)'. The 'MaxN' input field has the value '2'. The 'Tags' section includes a note to 'g or use down arrow to see full list --' and buttons for '/First appearance' and 'tags/MaxN image frame'. Below these are 'Passing (X)' and 'Observation Note' fields, both currently empty. There's also an 'Image notes' field with a placeholder 'Image notes:' and a checked 'Capture video' checkbox. At the bottom of the dialog are 'Update' and 'Cancel' buttons. The background shows the main observation list with three rows of data.

Time	Organism	Tags	MaxN
21:06:637	Blacktip shark (Carcharhinus limbatus)	MaxN image frame	1
20:52:861	Blacktip shark (Carcharhinus limbatus)	First appearance of organism, MaxN image frame, Passing	2
02:20:216		MARK ZERO TIME	

Alternatively, **right-click** on an observation, in any field, and select ‘Edit’.

This screenshot shows the same iNaturalist interface as above, but with a context menu open over the second observation row. The menu items are 'Delete', 'Edit', 'Go To Event', 'Change organism', and 'Cancel'. The 'Edit' option is highlighted. The rest of the screen elements are identical to the first screenshot.

Using this menu, you can also ‘Delete’ an observation or specific events within an observation. Choosing ‘Delete -> This entire observation’ will delete the observation and all events associated with it. Choosing ‘Delete -> This event within the observation’ will only delete the specific event selected (see below).

Send for Review

112:40:254

0.5x 1.5x

Observations

Time	Organism	Tags	MaxN	Observation Note
21:06:637	Blacktip shark (<i>Carcharhinus limbatus</i>)	MaxN image frame	1	
20:52:861	Blacktip shark (<i>Carcharhinus limbatus</i>)	First appearance of organism, MaxN image frame, Passing	2	Delete ▾ Edit Go To Event Change organism ▾ Cancel
20:52:861				
02:20:216		MARK ZERO TIME		

Select ‘Go To Event’ in any observation and the video will be set to the time the observation was recorded, and paused.

20:52:861 (0x)

112:40:254

Observations

Time	Organism	Tags	MaxN	Observation Note
21:06:637	Blacktip shark (<i>Carcharhinus limbatus</i>)	MaxN image frame	1	
20:52:861	Blacktip shark (<i>Carcharhinus limbatus</i>)	First appearance of organism, MaxN image frame, Passing	2	Delete ▾ Edit Go To Event (highlighted) Change organism ▾ Cancel
02:20:216		MARK ZERO TIME		

You can change the organism for animal observations by selecting ‘Change organism’ from the menu and navigating to the appropriate organism.

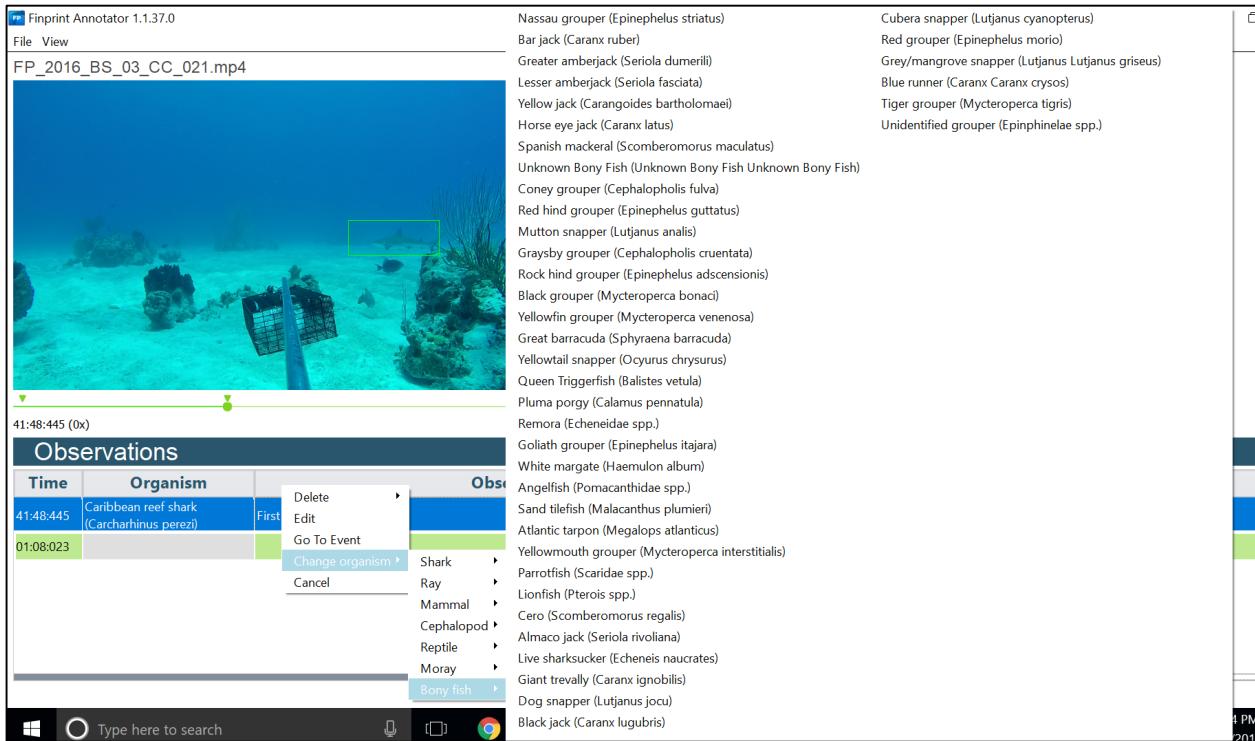
41:48:445 (0x)

Observations

Time	Organism	Tags	MaxN	Observation Note
41:48:445	Caribbean reef shark (<i>Carcharhinus perezi</i>)	First appear		
01:08:023				

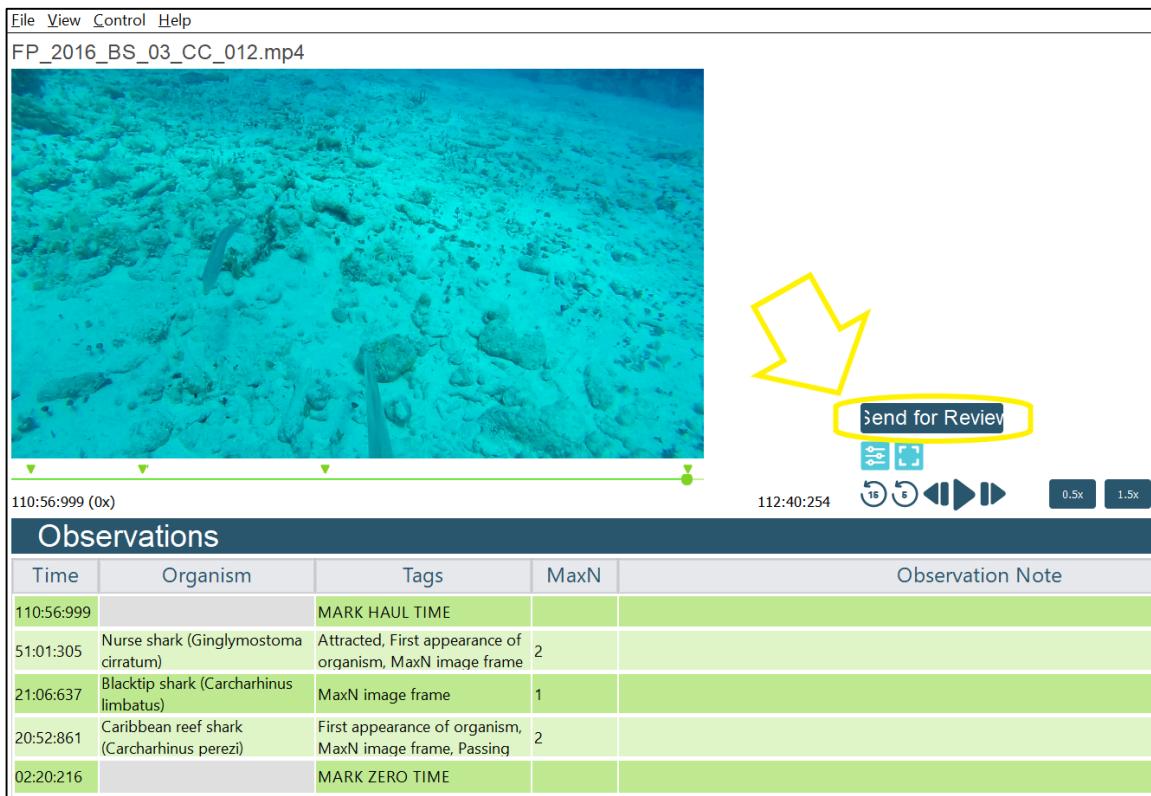
[Delete](#) ▾
[Edit](#)
[Go To Event](#)
[Change organism ▾](#) (highlighted)
[Cancel](#)

- Shark ▾
- Ray ▾
- Mammal ▾
- Cephalopod ▾
- Reptile ▾
- Moray ▾
- Bony fish ▾



Selecting the correct organism will automatically update the observation.

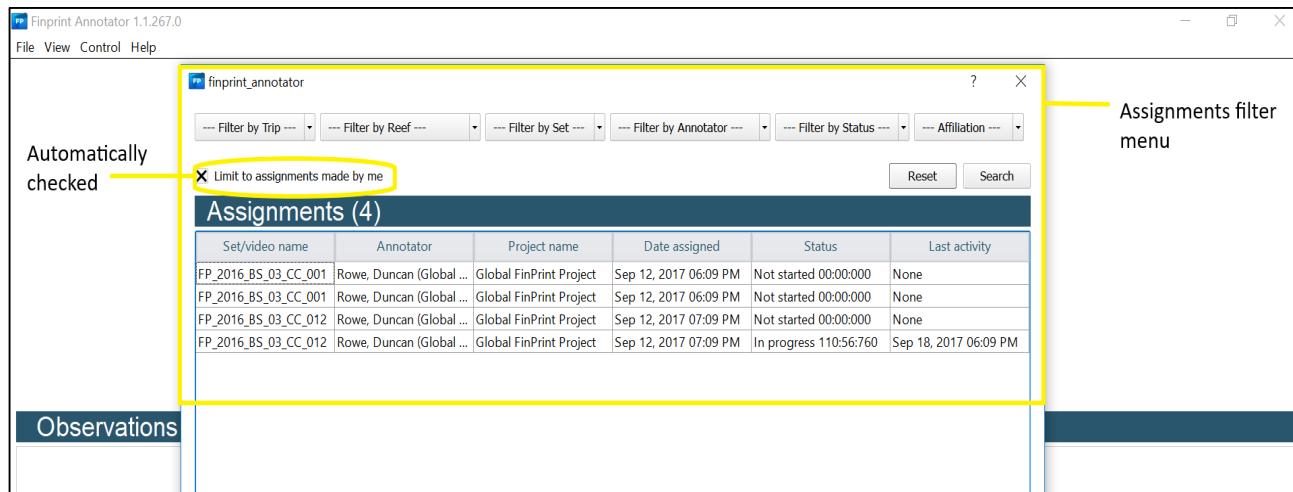
When you have watched the entire video and completed your observations, click '[Send for Review](#)', which will be enabled after you '**MARK HAUL TIME**'. Congratulations!



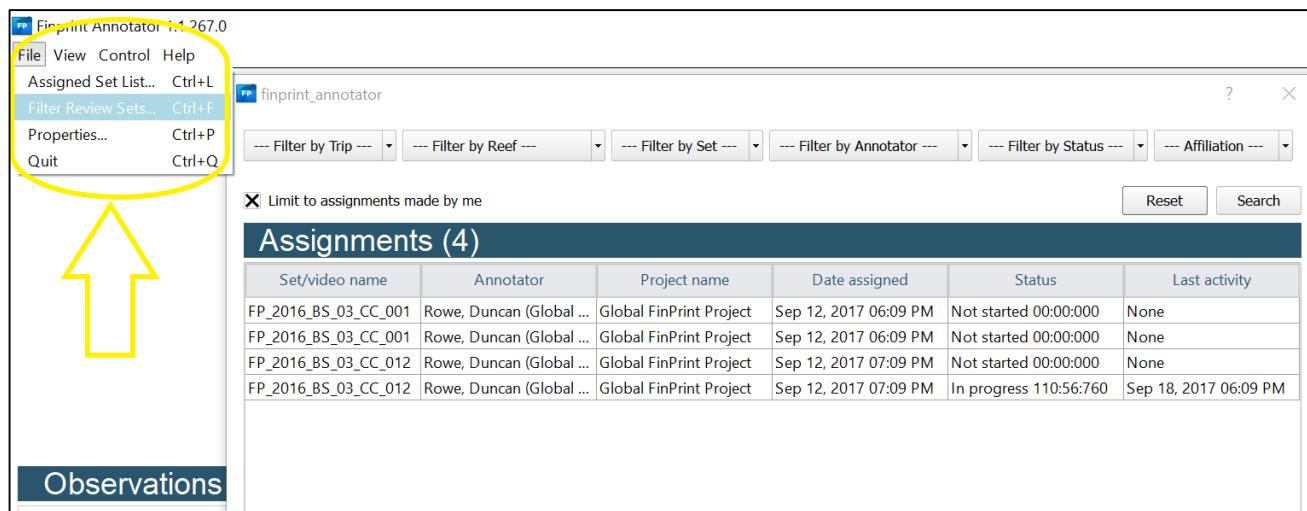
Annotator user guide for Leads/SuperUsers

Leads and SuperUsers will see a different pop-up window after signing in to the Annotator application.

The pop-up screen will show the Assignments filter menu, with details of any/all Assignments you have made.



You can access this at any time by using 'File → Filter Review Sets', or the shortcut **CTRL-F**.



From the Assignments filter menu, you can narrow your search by Trip, Reef, Set, Annotator, Status or Affiliation.

Use the drop-down menus to fill out any relevant fields.

fingerprint annotator

FP_2016_BS_03

--- Filter by Reef --- --- Filter by Set --- --- Filter by Annotator --- --- Filter by Status --- --- Affiliation ---

Reset Search

Limit to assignments made by me

Assignments (4)

	Annotator	Project name	Date assigned	Status	Last activity
FP_2016_BS_01	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 06:09 PM	Not started 00:00:000	None
FP_2016_BS_02	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 06:09 PM	Not started 00:00:000	None
FP_2016_BS_03	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 07:09 PM	Not started 00:00:000	None
FP_2016_BS_04	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 07:09 PM	In progress 110:56:760	Sep 18, 2017 06:09 PM

fingerprint annotator

FP_2016_BS_03

--- Filter by Reef --- --- Filter by Set --- **Rowe, Duncan (Global Fin**

--- Filter by Status --- --- Affiliation ---

Limit to assignments made by me

Assignments (4)

Set/video name	Annotator	Project name	Date assigned	Status	Last activity
FP_2016_BS_03_CC_001	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 06:09 PM	Not started 00:00:000	None
FP_2016_BS_03_CC_001	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 06:09 PM	Not started 00:00:000	None
FP_2016_BS_03_CC_012	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 07:09 PM	Not started 00:00:000	None
FP_2016_BS_03_CC_012	Rowe, Duncan (Global ...	Global FinPrint Project	Sep 12, 2017 07:09 PM	In progress 110:56:760	Sep 18, 2017 06:09 PM

When you are ready, click '**Search**' to proceed.

fingerprint annotator

FP_2016_BS_03

--- Filter by Reef --- CC_028

--- Filter by Annotator --- Ready for Review

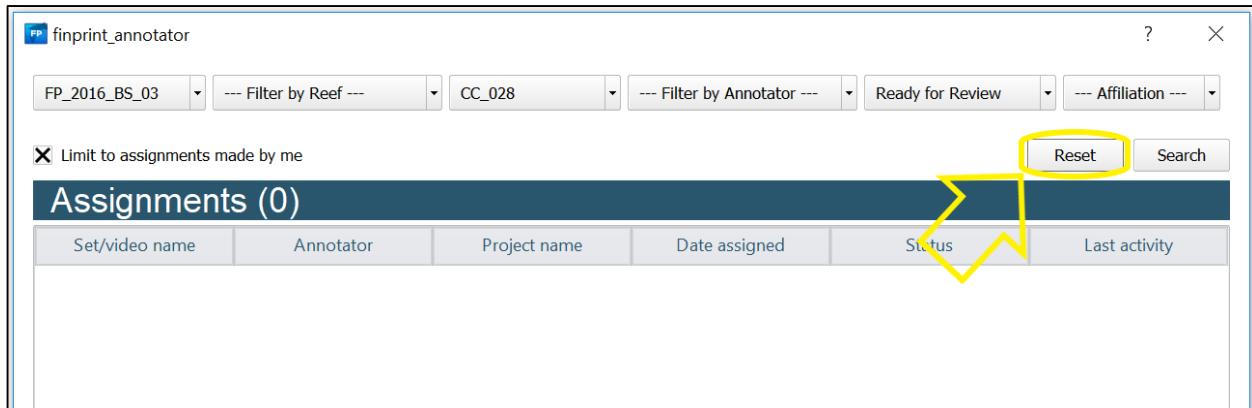
--- Filter by Status --- --- Affiliation ---

Limit to assignments made by me

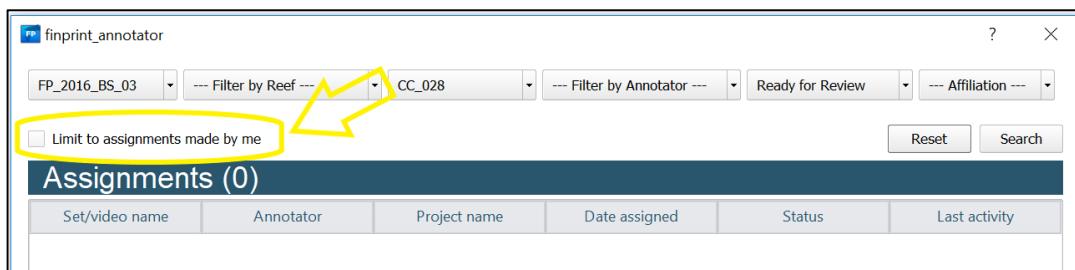
Assignments (0)

Set/video name	Annotator	Project name	Date assigned	Status	Last activity
----------------	-----------	--------------	---------------	--------	---------------

To clear all search fields and start again, click 'Reset'.



To search across all Assignments made by all Leads, uncheck the 'Limit to assignments made by me' box.



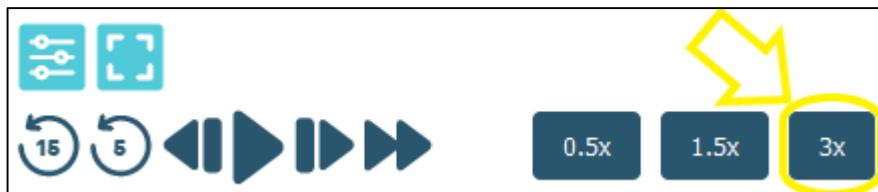
The results of your filtered search are displayed below:

The screenshot shows the 'Assignments (52)' screen. The 'Limit to assignments made by me' checkbox is unchecked. A yellow arrow points from the 'Limit to assignments made by me' checkbox to the 'Search' button. The table displays 52 rows of assignment data, including columns for Set/video name, Annotator, Project name, Date assigned, Status, and Last activity.

Set/video name	Annotator	Project name	Date assigned	Status	Last activity
FP_2016_BS_03_CC_018	Conover, Makenzie (S...	Global FinPrint Project	Feb 13, 2017 04:02 PM	Ready for review 93:14...	Feb 22, 2017 04:02 AM
FP_2016_BS_03_CC_020	Diehl, Olivia (SBU)	Global FinPrint Project	Feb 13, 2017 04:02 PM	Ready for review 94:55...	Mar 13, 2017 01:03 AM
FP_2016_BS_03_CC_010	Johnson, Lila (SBU)	Global FinPrint Project	Oct 05, 2016 07:10 PM	Ready for review 104:5...	Feb 06, 2017 08:02 PM
FP_2016_BS_03_CC_010	Murphy, Conor (SBU)	Global FinPrint Project	Feb 13, 2017 04:02 PM	Ready for review 104:5...	Mar 18, 2017 09:03 PM
FP_2016_BS_03_CC_031	George, Mariya (SBU)	Global FinPrint Project	Feb 13, 2017 05:02 PM	Ready for review 114:3...	Feb 17, 2017 06:02 AM
FP_2016_BS_03_CC_039	Sullivan, Jolee (SBU)	Global FinPrint Project	Feb 16, 2017 02:02 PM	Ready for review 106:3...	Feb 23, 2017 05:02 PM
FP_2016_BS_03_CC_023	Piechocki, Camilla (SBU)	Global FinPrint Project	Oct 07, 2016 08:10 PM	Ready for review 97:43...	Oct 12, 2016 11:10 PM
FP_2016_BS_03_CC_023	Ebbrecht, Stephanie (S...	Global FinPrint Project	Feb 13, 2017 04:02 PM	Ready for review 97:42...	Feb 18, 2017 09:02 PM
FP_2016_BS_03_CC_008	Balek, Natassia (SRII)	Global FinPrint Project	Oct 11, 2016 08:10 PM	Ready for review 93:03	Feb 07, 2017 08:02 PM

Video Playback Controls (Leads)

Leads and SuperUsers will have similar media controls to Annotators, except a '3x Playback' button is also enabled. Additionally, these users can use the time slider, or click on any observation/event in an Assignment to move directly to that point in the video.



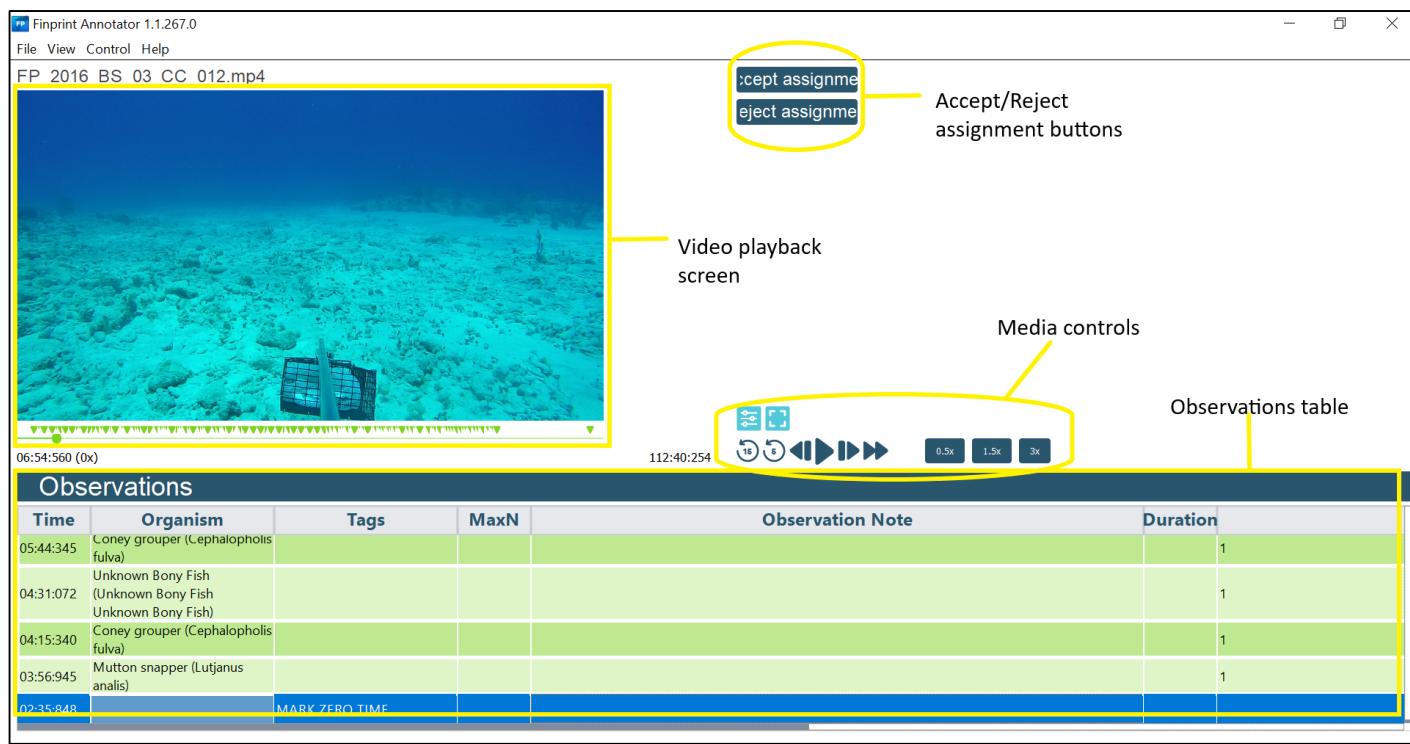
To Review an Assignment

Click once on an assignment to highlight it.

A screenshot of a software interface titled 'fingerprint_annotator'. At the top, there are several dropdown filters: 'FP_2016_BS_03', '--- Filter by Reef ---', '--- Filter by Set ---', '--- Filter by Annotator ---', 'Ready for Review' (which is highlighted with a yellow circle), and '--- Affiliation ---'. Below these filters is a checkbox 'Limit to assignments made by me' and two buttons 'Reset' and 'Search'. The main area is titled 'Assignments (52)' and contains a table with the following columns: Set/video name, Annotator, Project name, Date assigned, Status, and Last activity. The first row of the table is highlighted with a yellow box. The data for the first row is: FP_2016_BS_03_CC_018, Conover, Makenzie (S..., Global FinPrint Project, Feb 13, 2017 04:02 PM, Ready for review 93:14..., Feb 22, 2017 04:02 AM.

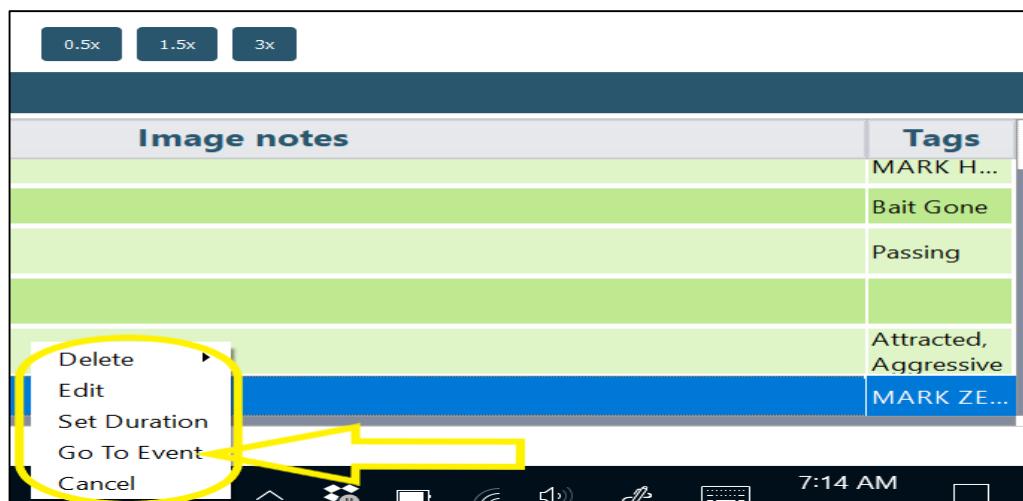
Double-click to open it.

The video will automatically open, but will not begin playback.

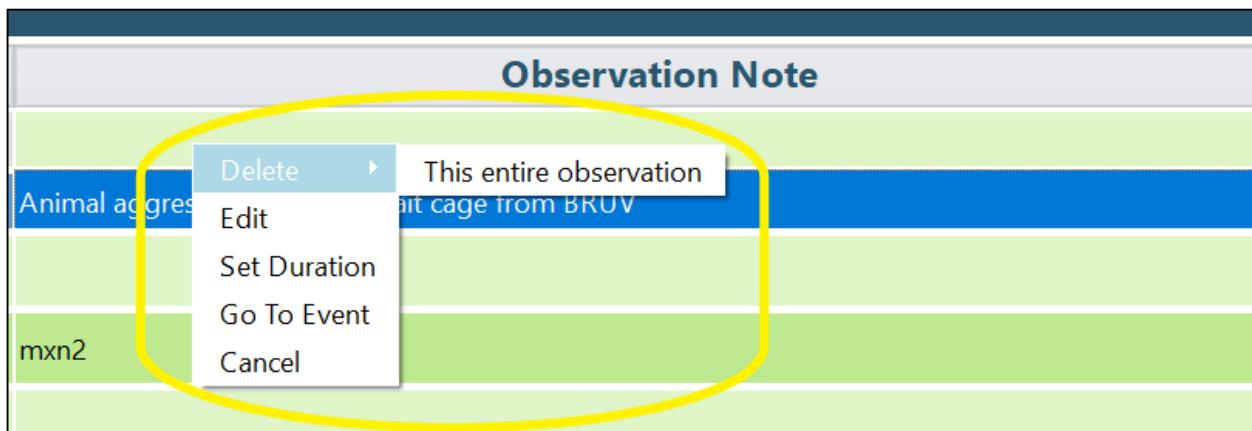


To Assess/Edit Observation Events

You can use the Observations table to navigate directly to any given Event. Each Observation is listed in reverse chronological order (ie the MARK ZERO TIME observation is listed at the bottom). Click once on an Event to highlight it. Right-click to open a pop-up menu. From there, click on '[Go To Event](#)'.



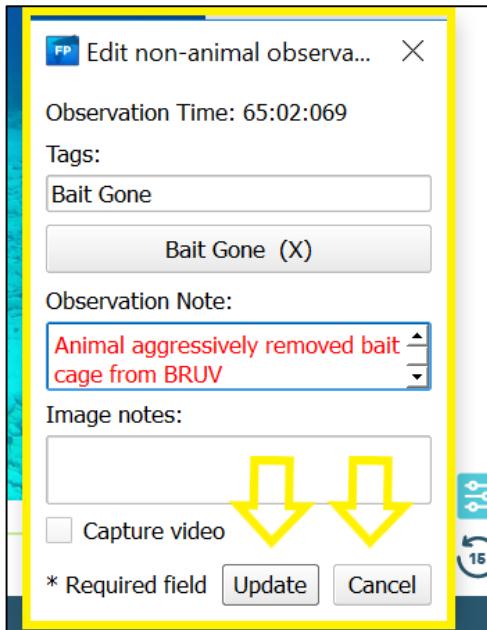
The video will automatically be set to the time of the event, but will not begin playback. You can right-click on any non-animal event to: [Go to the Event](#); [Edit the Event](#), [Delete](#) (the Event), or [Set Duration](#). Clicking '[Cancel](#)' will exit the pop-up menu.



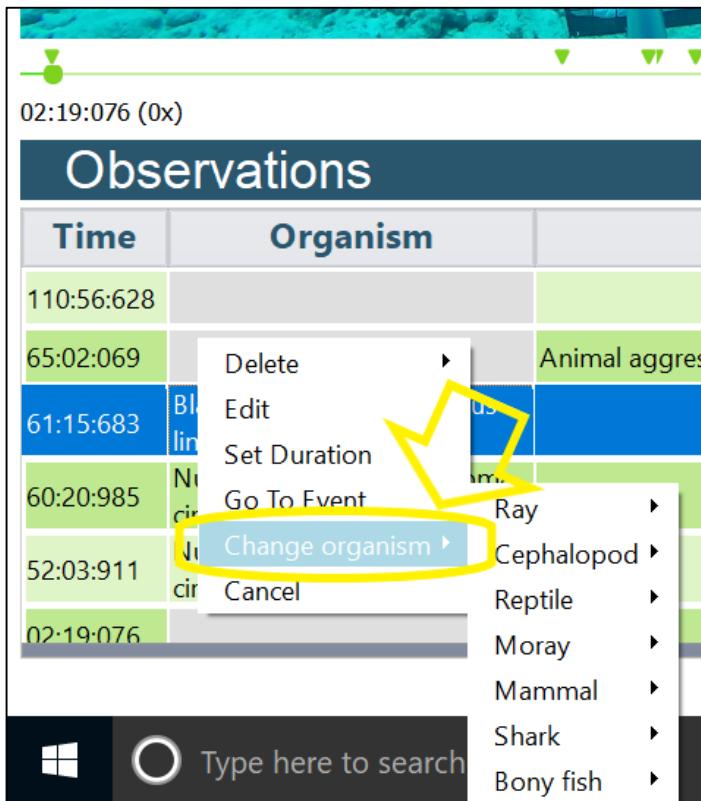
If you select '[Edit](#)', a pop-up window will appear (see below).

Time	Organism	Tags	MaxN	Observation Note
22:04:513	Sharpnose shark (Atlantic/Carib) (Rhizoprionodon sp.)			
22:00:757	Yellowtail snapper (<i>Ocyurus chrysurus</i>)			
21:41:271	Sharpnose shark (Atlantic/Carib) (Rhizoprionodon sp.)			

Make any changes needed, and click 'Update' to proceed. Click 'Cancel' to exit without saving any changes.



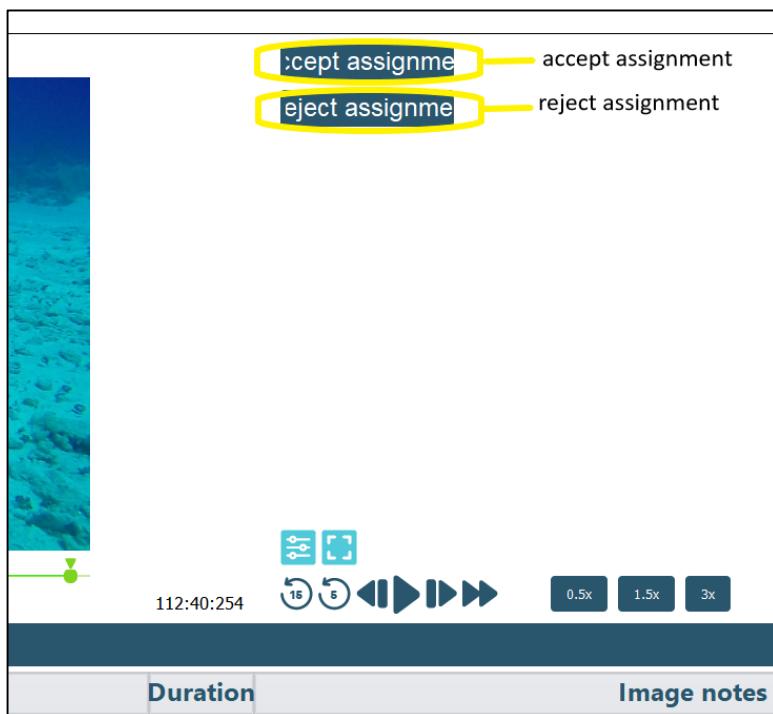
For Animal Events, a further option to 'Change the organism' will be available. This will provide a drop-down list of available organisms to choose from (see below).



When you select the correct Organism, the Event will automatically be updated. You do not need to save changes made in this way.

Accepting/Rejecting Assignments

When you have finished reviewing a video, click on either 'Accept assignment' or 'Reject assignment' to proceed.



Updates will automatically be made to the Finprint Global website.

Annotator setup and troubleshooting

Before opening the Annotator application, ensure the machine is set up for optimal performance. This can have a significant effect on performance.

Close unnecessary applications

Close any applications including email, productivity applications (Excel, Word, etc.), web browser, etc. that may be running - unless necessary for annotation. Users often have a browser or application open to reference a species guide. This is fine as long as it doesn't appear to affect video playback. If playback is not smooth, then you may need to close the browser/ application in between use, or use a secondary device (i.e. tablet, phone) for the species guide.

Set display resolution

Set the display resolution between 1920 X 1080 and 1280 X 960

The optimal resolution for the Annotator is typically **1920 x 1080**. Higher resolutions can cause playback issues. Lower resolutions down to 1280 x 960 are often acceptable, but may result in the observation table not fitting on screen in normal view mode (requiring horizontal scrolling). Anything less will typically result in text being truncated from controls.

To set resolution:

- a. Go to the desktop and right-click the mouse
- b. Select 'Display settings'
- c. Click on the 'Advanced display settings' link towards the bottom of the screen.
- d. Under 'Resolution' menu select '1920 x 1080' or, if necessary, a lower resolution at or above '1280 x 960'

Or:

- a. Go to the desktop and right-click the mouse
- b. Select 'Display settings'
- c. Select '1920 x 1080' from the 'Resolution' drop-down menu

Set Power Saver

Confirm the Power Saver setting is set to 'Balanced' or 'High Performance'

To check current Power Saver settings, click on the 'Battery' icon on the right-hand side of the toolbar. Power Mode will be displayed. In some newer versions of Windows you can adjust the 'Power Mode' slider to 'High Performance' from here. Otherwise, click on 'Power and Sleep Settings' then 'Advanced Settings' to view current Power Saver settings.

For Windows 10 machines, you can adjust the Power Saver settings via ONE of the following:

Computer settings

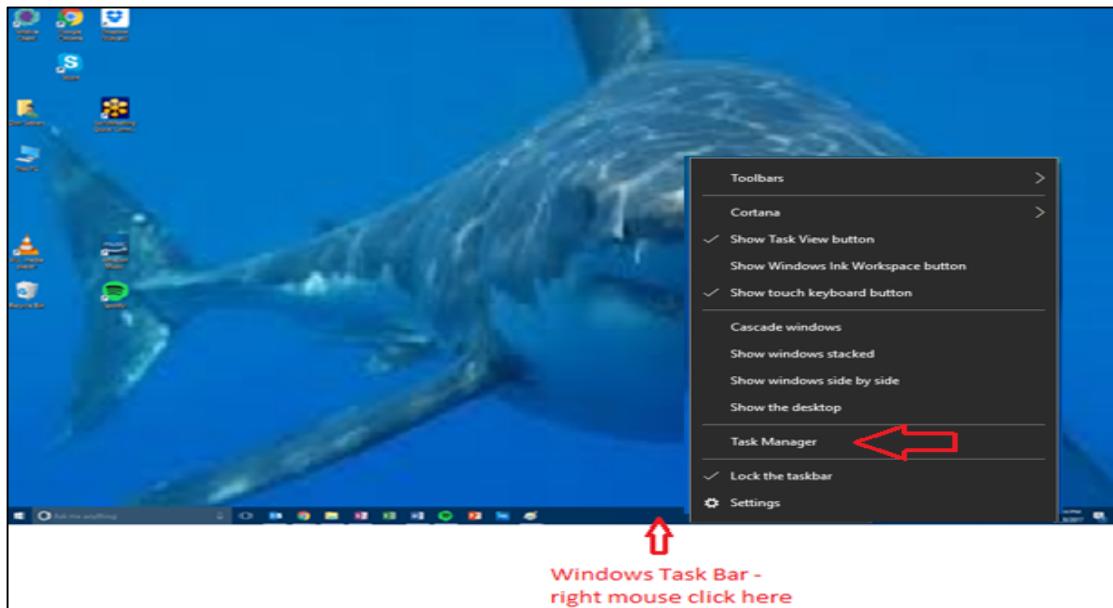
- a. Click the Windows/Start icon in the lower-left corner of the Windows Task Bar at the bottom of the screen
- b. Click the Settings icon (looks like a gear)
- c. Click 'System'
- d. Click 'Power and Sleep' from the menu on the left
- e. Click the 'Additional Power Settings' link
- f. Select either 'High Performance' or 'Balanced'

Or Control panel

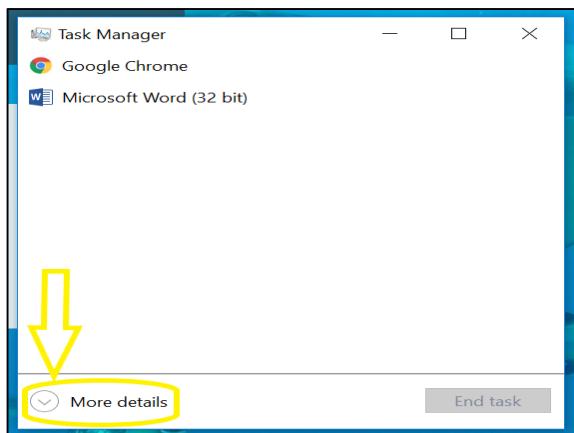
- a. Click the Windows/Start icon in the far-left corner of the Windows Task Bar at the bottom of the screen and type "control panel" **OR** type "control panel" into the Cortana input box in the lower left part of the Windows Task Bar.
- b. Click on 'System and Security'
- c. Click on 'Power Options'
- d. Select either 'High Performance' or 'Balanced'

Disable antivirus scan

If antivirus software is actively running a scan of the computer it can have a significant impact on its performance and the ability to play videos in the Annotator smoothly. If the antivirus software is currently running a scan, disable it. Open 'Task Manager'. Right-click on the Windows Task Bar at the bottom of the screen and select 'Task Manager' from the pop-up menu. (see below.)



To expand the Task Manager menu, click 'More Details'.

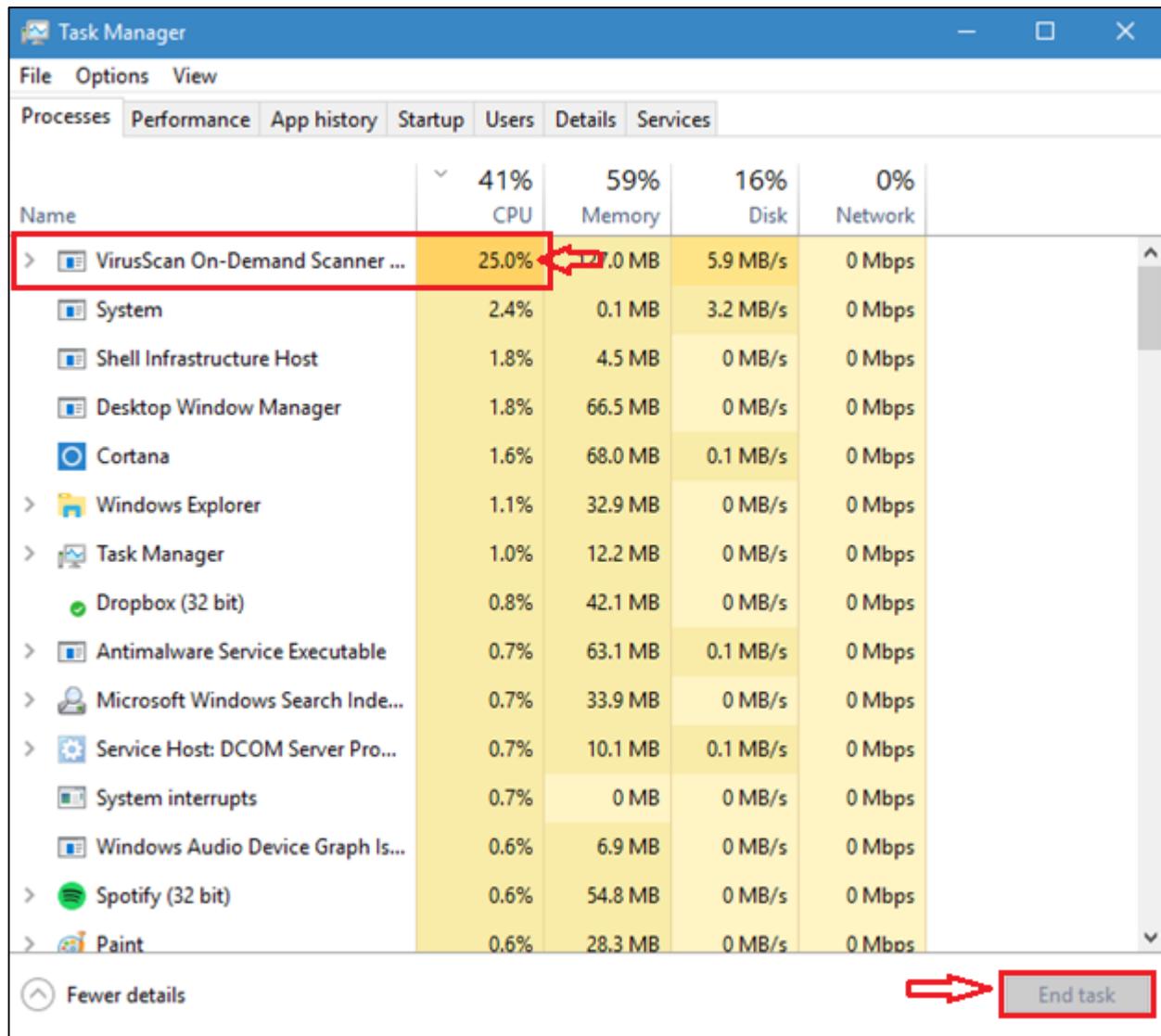


If your antivirus is running a scan, it should appear at or very near the top of the Task Manager list of processes (which should sort by default in order of the processes consuming the most CPU power.) You should see something like the following:

Name	41% CPU	59% Memory	16% Disk	0% Network
> VirusScan On-Demand Scanner ...	25.0%	7.0 MB	5.9 MB/s	0 Mbps
System	2.4%	0.1 MB	3.2 MB/s	0 Mbps
Shell Infrastructure Host	1.8%	4.5 MB	0 MB/s	0 Mbps
Desktop Window Manager	1.8%	66.5 MB	0 MB/s	0 Mbps
Cortana	1.6%	68.0 MB	0.1 MB/s	0 Mbps
> Windows Explorer	1.1%	32.9 MB	0 MB/s	0 Mbps
> Task Manager	1.0%	12.2 MB	0 MB/s	0 Mbps
Dropbox (32 bit)	0.8%	42.1 MB	0 MB/s	0 Mbps
> Antimalware Service Executable	0.7%	63.1 MB	0.1 MB/s	0 Mbps
> Microsoft Windows Search Inde...	0.7%	33.9 MB	0 MB/s	0 Mbps
> Service Host: DCOM Server Pro...	0.7%	10.1 MB	0.1 MB/s	0 Mbps
System interrupts	0.7%	0 MB	0 MB/s	0 Mbps
Windows Audio Device Graph Is...	0.6%	6.9 MB	0 MB/s	0 Mbps
> Spotify (32 bit)	0.6%	54.8 MB	0 MB/s	0 Mbps
> Paint	0.6%	28.3 MB	0 MB/s	0 Mbps

(NOTE: Depending on the specific antivirus software you have, you may see a variation of this, but it should be clear that an antivirus scan is running and consuming a significant amount (>10%) of CPU resources.)

To stop the antivirus software from running a scan, click on the virus scan item in the list and then click on the “End task” button in the bottom right corner of the Task Manager.



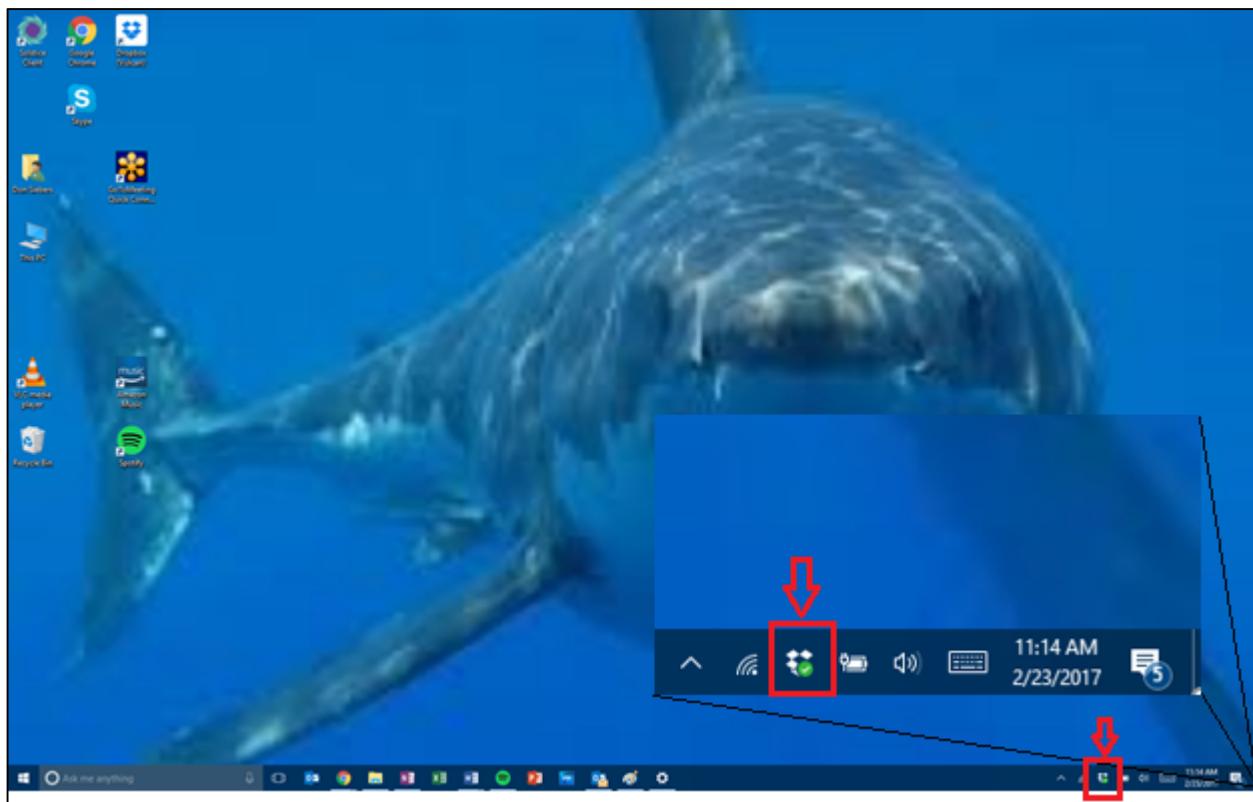
NOTE: Anti-virus scan software is typically configured to run scans periodically, so stopping a scan that's currently running will not prevent future scheduled scans from running.

Disable the syncing service of applications such as Dropbox, Google Drive, and Microsoft OneDrive

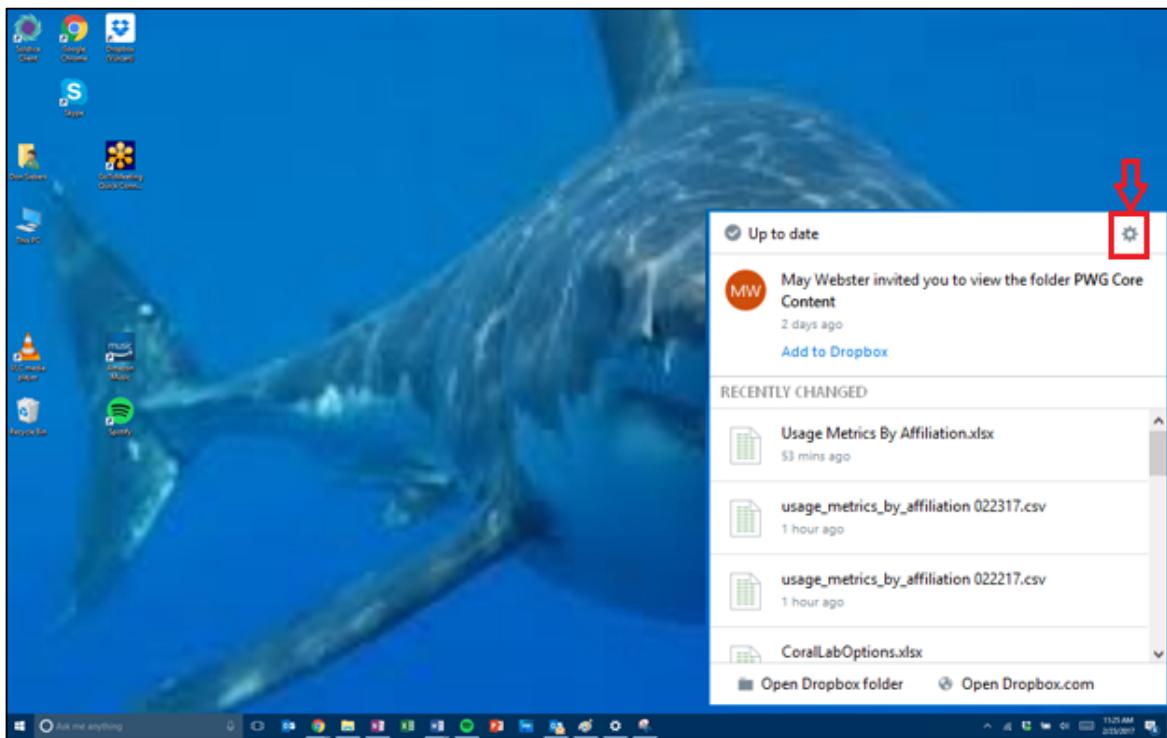
Popular cloud-based file management software such as those listed above will regularly scan the computer to see if changes were made to documents stored locally that need to be copied to the cloud. This synchronization process can affect the computer's performance and the ability to play videos in the Annotator smoothly. Disable this synchronization process temporarily while you are using the Annotator tool. Each different type of application will have its own unique way for disabling the sync service, but below is an example of how to do so for one of the more common cloud file services – Dropbox, as well as links to disabling Google Drive and Microsoft OneDrive. When you have finished using the Annotator, you can go back into the application settings and re-enable the sync process.

For Dropbox, for example, the synchronization process can be disabled via the following steps:

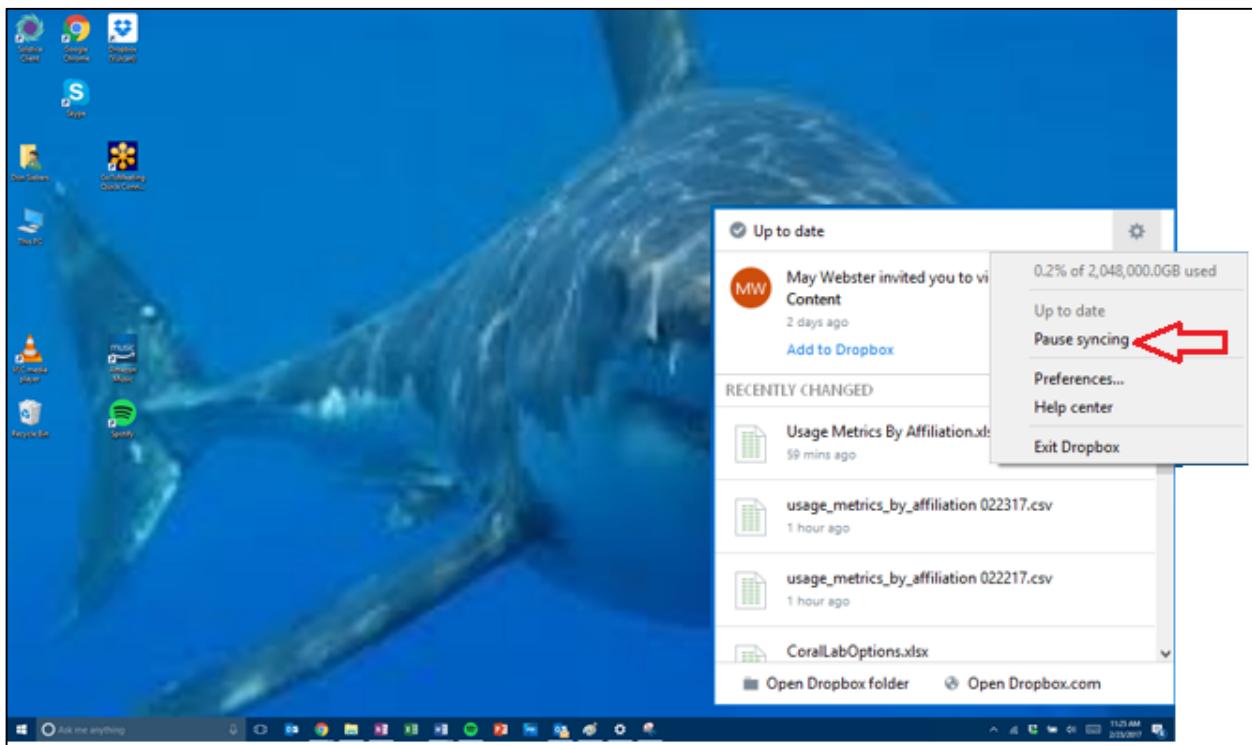
If Dropbox is running on your machine, you should see an application icon in the System Tray in the right-hand corner of the Windows Task Bar along the bottom of the computer screen. Click on this icon to pull up a Dropbox menu.



Click on the Settings icon (looks like a gear) in the upper right corner of the menu that appears.



Click on “Pause syncing” from the settings menu that appears



Once you have finished using the Annotator tool, you can go back into the Dropbox application settings in the same manner and select “Resume syncing” to re-enable the syncing process.

For Google Drive and Microsoft OneDrive, the following links provide instructions on how to disable the syncing process:

Google Drive – follow the steps in “Quit Google Drive” in the following on-line help:

<https://support.google.com/drive/answer/2375081?hl=en>

Microsoft OneDrive – follow the steps in “Disable OneDrive in Windows 8.1 and Windows 10” in the following on-line help: <https://support.office.com/en-US/article/Turn-off-or-uninstall-OneDrive-f32a17ce-3336-40fe-9c38-6efb09f944b0?ui=en-US&rs=en-US&ad=US&fromAR=1>

(NOTE: For Microsoft OneDrive follow the same instructions but choose “Disabled” in the final step, in order to re-enable file syncing.)

For technically advanced users

Disable other applications/background processes that are consuming a significant amount of CPU resources.

NOTE: if you are not comfortable with making advanced changes, proceed to the section below on sending system information to your lead.

In addition to the troubleshooting steps outlined above, advanced users can review the list of applications and background processes running in Task Manager and disable those that are consuming a significant amount (> 5-10%) of CPU resources.

NOTE: This is recommended for more technically advanced users only. Caution should be taken to not disable any processes that might affect normal computer functioning.

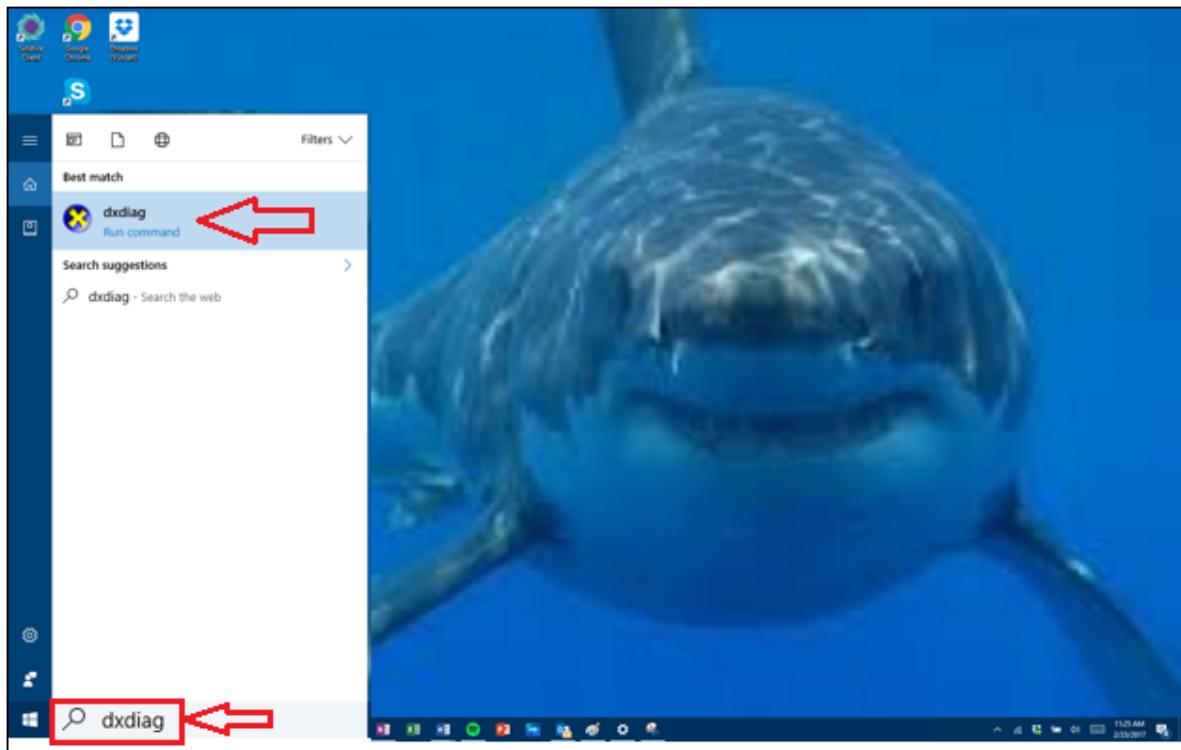
Additional Troubleshooting: Sending computer info to your Lead

If you are still experiencing playback issues, you can send two things to your FinPrint Lead that will help them troubleshoot the Annotator playback performance further. This information will help them identify whether there are resource limitations on your machine and/or another application may be interfering with its ability to play smoothly. These include a copy of your “DxDiag.txt” file and a screen shot of your Task Manager.

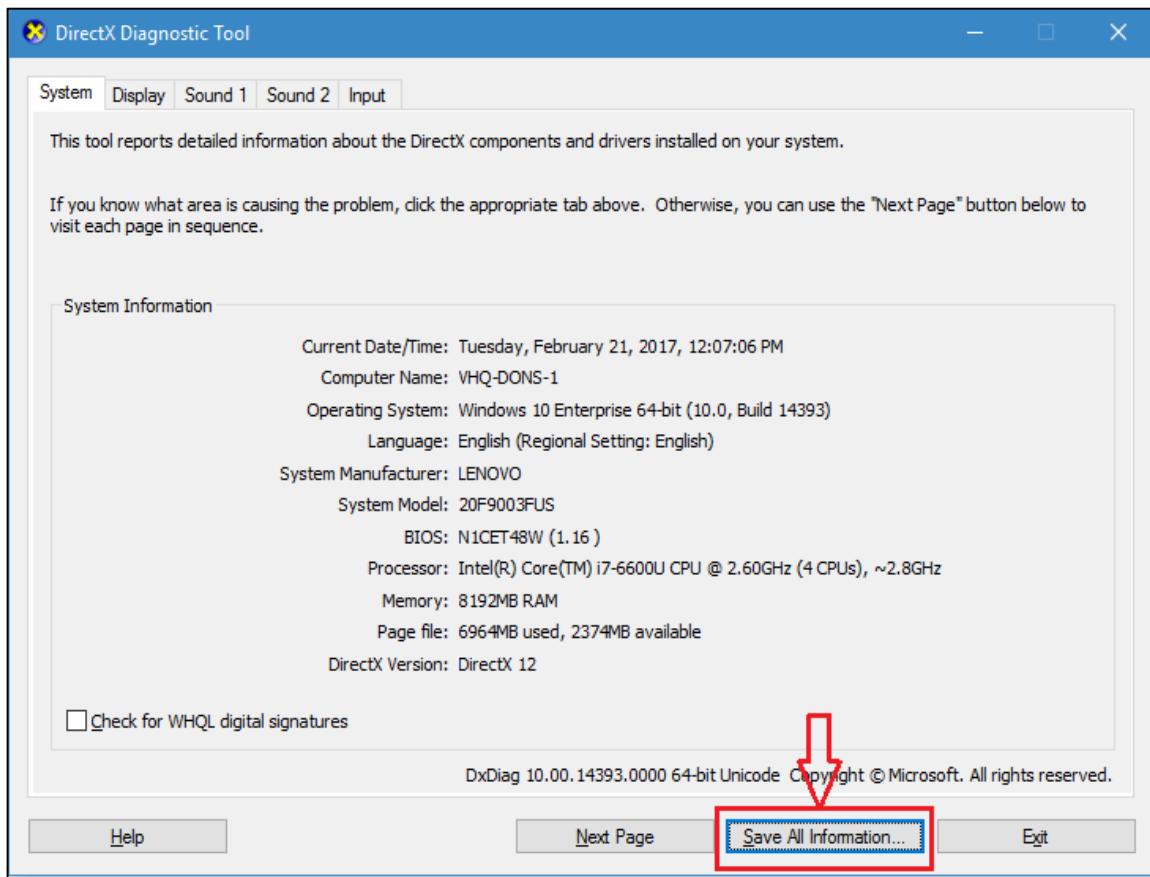
Create a “DxDiag.txt” File

This file can be created using the DirectX Diagnostic Tool that should already exist on your computer and will capture your computer’s system information.

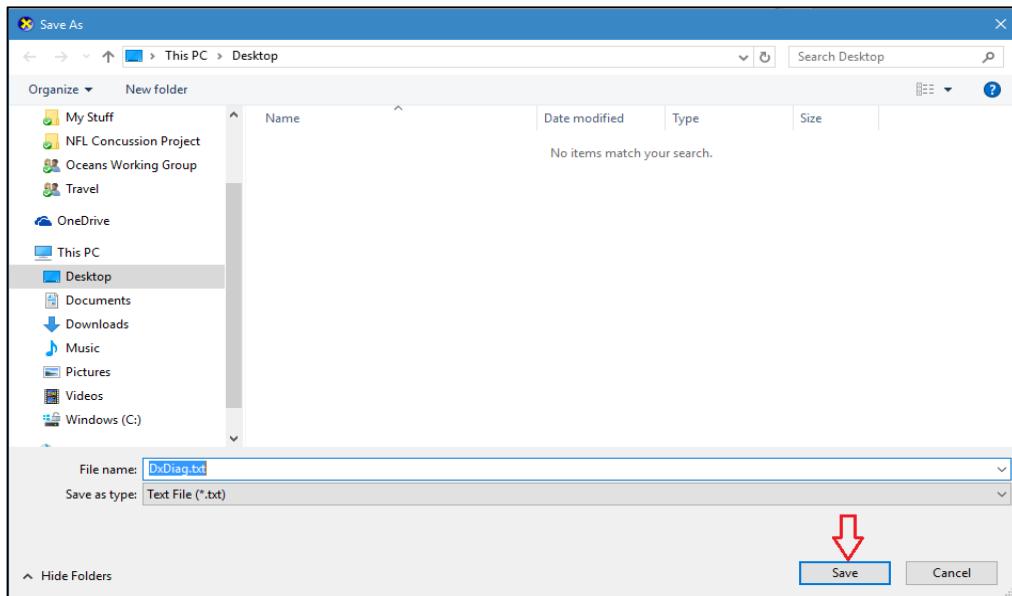
Click the Windows/Start icon in the far-left corner of your Windows Task Bar and type ‘**dxdiag**’ OR type **dxdiag**’ into the Cortana input box in your Windows Task Bar and select the **‘dxdiag (Run Command)’** in the results menu.



The DirectX Diagnostic Tool will start and an application screen will launch (see below). Click on the **‘Save All Information’** button at the bottom.



Save the DxDiag.txt file to a location on your computer (Desktop is default).

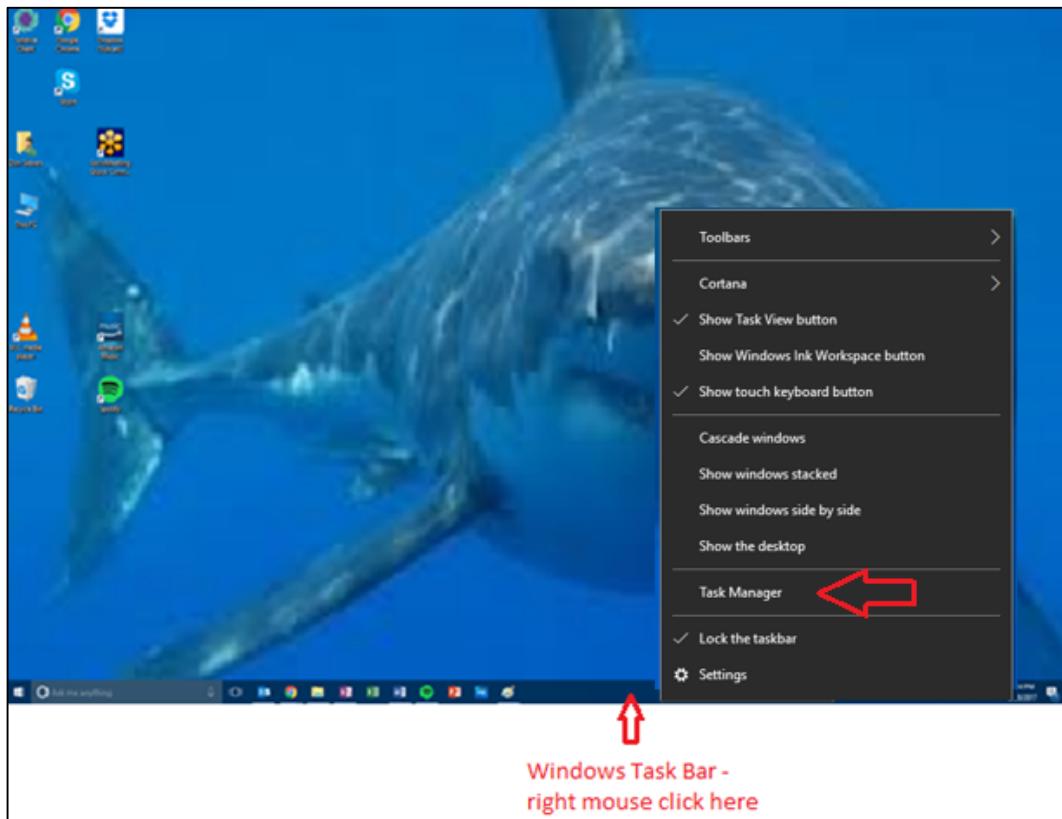


Email this DxDiag.txt file to your FinPrint Lead. They will review your computer's system profile to determine what other next steps can be taken.

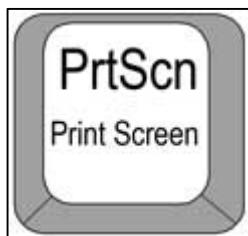
Create a screenshot of Task Manager

Task Manager will show other applications that could be interfering with the Annotator playing smoothly. Follow these steps to generate a screen shot of your Task Manager and send it to your FinPrint Lead.

Right-click on the Windows Task Bar at the bottom of your screen and select 'Task Manager' from the pop-up menu.



The Task Manager window will appear. Take a screen shot of your machine by finding and pressing the 'PrtScn' or 'PrtSc' or equivalent key on your keyboard.



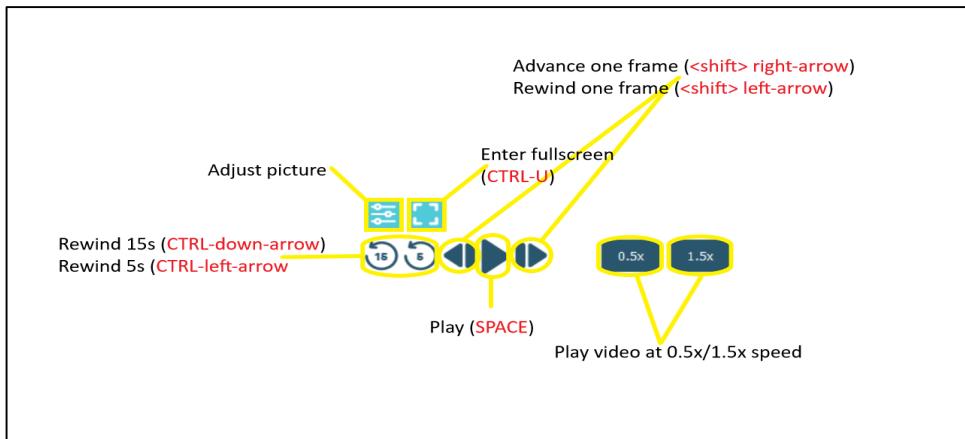
The screenshot shows the Windows Task Manager window with the 'Processes' tab selected. The table displays the following data:

Name	5% CPU	63% Memory	0% Disk	0% Network
Windows Explorer	1.4%	32.8 MB	0 MB/s	0 Mbps
Desktop Window Manager	1.3%	73.8 MB	0 MB/s	0 Mbps
Task Manager	1.0%	12.3 MB	0 MB/s	0 Mbps
Dropbox (32 bit)	0.6%	49.8 MB	0 MB/s	0 Mbps
System	0.3%	0.1 MB	0 MB/s	0 Mbps
Google Chrome (2)	0.2%	113.3 MB	0.1 MB/s	0.1 Mbps
System interrupts	0.2%	0 MB	0 MB/s	0 Mbps
Google Chrome	0.2%	21.0 MB	0 MB/s	0 Mbps
Service Host: Remote Procedur...	0.2%	5.4 MB	0 MB/s	0 Mbps
Microsoft Word (2)	0.2%	165.8 MB	0 MB/s	0 Mbps
Touch Keyboard and Handwriti...	0.1%	5.3 MB	0 MB/s	0 Mbps
Snipping Tool	0.1%	1.6 MB	0 MB/s	0 Mbps
Microsoft OneNote	0.1%	82.9 MB	0 MB/s	0 Mbps
Antimalware Service Executable	0%	56.1 MB	0 MB/s	0 Mbps
Google Chrome	0%	182.2 MB	0 MB/s	0 Mbps

Fewer details End task

After capturing the screen print, paste it into a Microsoft Word (or equivalent word processor) document, save the document file on your machine, and email the document to your FinPrint Lead as an attachment. Saving it within a Word document makes it easier to zoom in on and read.

Quick Start Media Controls



Shortcuts: Keyboard shortcuts are marked in this guide in red.

CTRL-L → Open assigned set list

CTRL-P → Edit video folder properties

CTRL-F (Leads only) → Open assignments filter menu

CTRL-Q → Quit application

In-video Shortcuts:

CTRL-U → Enter/Exit Fullscreen mode (when video is loaded)

SPACE → Play/Pause video

Mouse and on-screen buttons

Mouse commands and on-screen buttons (eg 'Save') are marked in green. For example, 'Click-and-drag' a rectangle around the animal.

