

902304 - Piscivore Cam

Week 51

1. Paul McGill
 - a. Worked with Jared to troubleshoot camera glitches during the last LRAUV mission
2. Brian Schlining
 - a. [Cleared out a backlog of Piscivore videos](#) from atlas:/M3_Staging that needed to be renamed and migrated to titan:/m3/Projects/Piscivore.

Week 50

1. Kevin Barnard
 - a. Started working on YOLOv8 → VARS data loader
2. Paul McGill
 - a. Ordered multiple cameras and Raspberry Pi boards for evaluation
 - b. Attended brainstorming session on what hardware might improve Piscivore image quality

Week 46

1. Paul McGill
 - a. Choosing components for a Raspberry Pi camera system for testing

Week 45

1. Paul McGill
 - a. Had meeting to discuss this year's progress and plans for next year

Week 43

1. Brian Schlining
 - a. Updated the code that migrates and renames videos from piscivore's staging area to the permanent archive on titan:/m3. It will now intentionally fail on a video if it can't extract a timestamp from the video's metadata.

Week 42

1. Paul McGill
 - a. Helped Jared with prep for this week's deployment
 - b. Did capacity test on controller Li-ion cell to see why it died

Week 39

1. Paul McGill
 - a. Prepping for this week's deployment of two cameras on LRAUV

Week 35

1. Kevin Barnard
 - a. Met with team to review ML workflow and outline improvements
 - b. Scoped process for ingesting bounding box proposals into VARS

- c. Reviewed Lonny's code
- 2. Brian Schlining
 - a. Investigating issues with metadata extraction from Piscivore videos.

Week 34

- 1. Kevin Barnard
 - a. Made some improvements to Lonny's video processing code
- 2. Paul McGill
 - a. Got another camera controller I/O board built to replace one of our cameras that was stopping recordings early.

Week 33

- 1. Paul McGill
 - a. Troubleshooting issue with last deployment where one of the cameras stopped recording part way through each day. We'll build a new camera module in case the old one has an intermittent failure.

Week 32

- 1. Paul McGill
 - a. Found and fixed more bugs in v1.2.0 of camera controller code, ran a multi-day test, and loaded code onto both cameras for this week's two-camera deployment on Pontus.

Week 31

- 1. Paul McGill
 - a. Discovered another bug in the latest code release but I fixed it.
 - b. Getting another camera controller I/O board built
 - c. Preparing for two-camera deployment next Tue

Week 30

- 1. Paul McGill
 - a. Released version 1.2.0 of camera controller code with user interface improvements

Week 29

- 1. Paul McGill
 - a. Made major progress on next revision of camera controller code.
 - b. Reviewed video from most recent deployment. We got good stuff!
- 2. Brian Schlining
 - a. Set up applications that automate [moving/renaming piscivore files](#) from atlas:/M3_Staging to [titan:/M3/Projects/Piscivore](#) and [registering them](#) in MBARI's [video asset manager](#).

Week 26

- 1. Brian Schlining
 - a. The team fixed issues with time stamps on videos. Brian [ran a dry-run import](#) on the test video set.
 - b. Wrote quick proof-of-concept to quickly apply ML analysis for piscivore videos. ([auto-analyze.sc](#))

Week 25

- 1. Paul McGill

- a. Preparing camera for deployment next Monday.
- b. Fixing minor interface bugs in camera control code.

Week 21

1. Paul McGill
 - a. Attempted to run v2.1 camera on bench but had multiple problems
 - b. Configured and deployed v2.0 camera for its third LRAUV deployment on Tue

Week 20

1. Paul McGill
 - a. Designed and built improved Piscavore Camera controller I/O board. Tested it with George S. and it works.
 - b. Preparing latest camera for deployment next Tue.

Week 19

1. Paul McGill
 - a. Designing and building new controller I/O board to better control GoFish camera.

Week 18

1. Paul McGill
 - a. Prepped and deployed camera for its second deployment, coming back on Thu.

Week 17

1. Paul McGill
 - a. Checked condition of PCam v2.0 from its first deployment—it worked! Battery voltages were about where they should be.
 - b. Reviewed a bunch of video from PCam to look for interesting events.
2. Brian Schlining
 - a. Piscivore video staging and video asset manager registration code is ready. Waiting for a network share fix in order to finalize the setup.

Week 16

1. Paul McGill
 - a. Ran a full-up test over the weekend to check hardware and software.
 - b. Prepared PCam for deployment and it went out on an LRAUV on Tue.

Week 15

1. Brian Schlining
 - a. Spun up a new model server with a fish detector at <http://perceptron.shore.mbari.org:8082/>

Week 14

1. Paul McGill
 - a. Wrote last part of camera controller code, in testing now.
 - b. Set up a run-time test with George S. to see how long main battery would last.
2. Brian Schlining
 - a. Working though staging piscovre videos with ambiguous timestamps to our video asset manager.

Week 13

1. Paul McGill
 - a. Did clock accuracy testing of controller boards.
 - b. Wrote the deployment section of the controller code and it is being tested now.
2. Brian Schlining
 - a. Wrote [an app](#) to [stage Piscivore video](#) to M3.
 - b. [Wrote code](#) to [register Psicivore videos](#) with VARS.

Week 12

1. Paul McGill
 - a. Continuing to work on camera controller code. Went over functional req's with Jared F.
 - b. Did more power testing of controller and tried to run clock accuracy test but battery died.
2. Brian Schlining
 - a. Working out the video archiving workflow with Jared

Week 11

1. Paul McGill
 - a. Making good progress on Arduino code for camera controller

Week 10

1. Paul McGill
 - a. Tested new code with George to power up camera and start recording—it works.
 - b. Built new camera controller board to interface with Pololu power supply for testing next week.
2. Brian Schlining
 - a. Met with Jared and Lonny to discuss video management for Piscivore. The video archive for these videos will be on titan:/M3/Projects/Piscivore

Week 9

1. Paul McGill
 - a. Wrote code for TinyZero microcontroller to control Piscavore camera.
 - b. Bench-tested controller and camera with George and adjusted time constants to make things work.

Week 6

1. Paul McGill
 - a. Met with Jared about plans for this year, trying to set date for kickoff meeting once we know exactly who's on project this year.