Plan Overview

A Data Management Plan created using DMPTool

Title: Shark biomechanics A

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Shark biomechanics A

Data and Materials Produced

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Data to be collected:

Video footage of a shark swimming. That video and clip it in video editing software like iMovie into smaller usable segments that contain a behavior I want (straight swimming, turning, other maneuvers). Each of those smaller segments are only about 10 seconds long. Each small clip of video is then loaded into the point tracking software. I use LoggerPro which is cheap and readily available, but there are other custom scripts out there. In LoggerPro, I track points on the sharks body in each frame of video. There are usually 120 frames per second and about 10 seconds of video. The LoggerPro software records those points in an x,y coordinate system. Then I can export those data into excel. In excel, use those data to calculate velocity, acceleration, curvature of the body, basically any variable I want to look at.

What data will be generated: velocity of the movement, the acceleration, the curvature; the measurements of the mechanics' of the shark swimming.

What data types: exerimental measures, and processed to test hypothese

How will you capture and create the data? From video, to point tracking software, exported to excel

I don't believe there is existing data used in the researchat this point.

Standards, Formats and Metadata

Describe the standards to be used for all the data types anticipated, including data or file format and metadata.

File formats: CSV, it contains the data without being huge (hours of video)

What form will the metadata take? I haven't totally decided. It needs to define the coordinates, so the variables are clear (I guess like any metadata)

DataCite's metadata schema version 3.1 (https://schema.datacite.org/), is a possibility

Which metadata standard will you use and why have you chosen them?

Roles and Responsibilities

Describe the roles and responsibilities of all parties with respect to the management of the data (including contingency plans for the departure of key personnel from the project).

How will the responsibilities regarding the management of your data will be delegated?

No clue

Dissemination Methods

Describe the dissemination methods that will be used to make data and metadata available to others during the period of the award, and any modifications or additional technical information regarding data access after the grant ends.

- What transformations will be necessary to prepare data for preservation / data sharing?
- What metadata/ documentation will be submitted alongside the data or created on deposit/ transformation in order to make the data reusable?

Policies for Data Sharing and Public Access

Describe the PI's policies for data sharing, public access and re-use, including re-distribution by others and the production of derivatives. Where appropriate, include provisions for protection of privacy, confidentiality, security, intellectual property rights and other rights.

Are there ethical and privacy issues? Don't thinks so

- Who will hold the intellectual property rights to the data and how might this affect data access?

Archiving, Storage and Preservation

Where relevant, describe plans for archiving data, samples, software, and other research products, and for on-going access to these products through their lifecycle of usefulness to research and education.

- What is the long-term strategy for maintaining, curating and archiving the data?

Putting it someplace it can stay....

- What metadata/documentation will be submitted alongside the data or created on deposit/transformation in order to make the data reusable?