DRAFT 2016 Alaska EM imagery review protocols for EM selection pool

Among video reviewer quality:

- Follow standard reviewer quality control protocol (blind reads every 3 months) to ensure consistent review.

For each drive, capture:

1. Drive Metadata:
    a. ADFG permit #
    b. Date drive retrieved
    c. Field assessment notes (Saltwater/Archipelago notes when drive was picked up)
    d. Logbook: Y/N
    e. Vessel Attributes: vessel configuration; fishing gear; deck gear; camera location; EM configuration; and fishing characteristics (day vs night fishing; side-haul vs stern haul)

2. Initial review of drive imagery to answer the following:
    a. Is sensor data complete? Y/N
    b. Is imagery/video complete? Y/N

3. Data for each Trip:
    a. Trip start and end date and time
    b. Trip start and end ports (locations)
    c. Time gaps – characterize type of time gap, location within trip, and duration / number of missing sets (as possible)
    d. Target fishery: Trip targets will be assigned by using standard Catch Accounting System protocols based on the predominant retained species.
    e. Number of fished sets as determined by the sensors
    f. Paper logbook data (effort logs, IPHC logs)
        i. Key punch all data and maintain data tables. If an IPHC logbook is provided, then only enter the information that is collected on the effort log.

4. Data for each Set:
    a. Start and end date and time
    b. Start and end locations (latitude and longitude from sensors)
    c. Gear type (within longline, differentiate snap and fixed gear)
    d. Time gaps, GPS gaps, sensor gaps, video gaps (Y/N)
    e. No video (Y/N) and why if No
    f. Streamer line used (Y/N)
    g. Time to review imagery for the set
    h. Reviewer confidence in data captures. EM reviewers will provide a data confidence rating (high, medium, low).
    i. Image quality: EM reviewers will provide an image quality assessment (high, medium, low).
    j. For low image quality, they will assign a reason for the low image quality. Note that AMR will provide field assessment notes that might provide more information about why there was low quality.

5. Effort & catch data for 100% of sets (in the future, the following items could be collected from a sub-set of randomly selected hauls):
   a. Effort Data
      i. Size of each set
         1. Amount of time to retrieve set
         2. Use the time & lat/lons from the sensors to calculate the length of the set
      ii. Any unusable or missing portions of set: Quantify the portion of set with missing or unusable image data (where catch and disposition cannot be identified). Quantify start/stop times for data gaps.
         1. Reason for low quality image data
         2. Reason for missing image data; portions of set retrieval without imagery
   b. Catch Data (including inverts, birds, and mammals)
      i. Species IDs to lowest level
         1. When a partial fish is caught (e.g. fish head, lips) and the reviewer can tell what species it is, then the species code will be used with a note designating a partial fish. If the species cannot be determined because too much of the fish is missing, then the species group code for the unidentified fish is used, again with comment only lips or heads. For halibut, it will be recorded as species halibut with a Discarded-Damaged disposition.
         2. If a seabird is caught, then capture a still image for post-hoc species ID confirmation. Record if the bird was not held in front of the camera for enough time for a still image to be captured.
      ii. Counts of each species
      iii. Disposition of catch using the following categories:
         1. Retained – General
         2. Retained – Damaged
         3. Discarded – General
         4. Discarded – Damaged
         5. Drop off below water
         6. Drop off above water
         7. Utilized onboard
      iv. For discarded Halibut Catch
         1. Injury key/Release condition
         2. Release method

6. Streamer line presence/absence when gear being deployed

7. Fill out vessels score card

Commented [JM1]: Lingering issue: Use of continuous streamer line camera recording prevents computer from going into sleep mode when engine is shut off. This requires the skipper to remember to manually turn the computer back on when the engine is started back up. Howard and his team will be working on a solution for making the system sleep when the engine is shut down even if a camera is actively recording. If workgroup is fine with the seabird camera being off when the engine is off if that solves the problem.

Commented [JM2]: EMWG discussion point. This was on the 2015 review protocol list, but to date, PacStates has not had a score card to complete. Do we really need it? It seems like the video quality information being collected for the trip and sets could be used in a "score"