

Rabbit Burrow Mapping

24 Sep 2015 Client Interview Transcript

Budget & Timeline

- No budget set aside for this project. Drs. Rachlow and Conway should be able to come up with around \$1,000 as they did last year. Essentially, just ask when purchasing. Suggested not going through College of Engineering.
- Drs. Rachlow and Conway would like an update on progress about every three weeks.
- Clients would like testing to occur early in the Spring so feedback can be given.
 - Pygmy rabbit burrows would be in Custer/Lemhi county.
 - Owls burrow near Umatilla; some test sites are 1hr drive away.
 - Grad students will be in field in January.
 - Can find testing opportunities earlier if needed.
 - Artificial burrows exist that have access ports - could be useful for testing.

User Interface Needs

- Real time video playback is ideal for maneuvering in the burrows and making decisions about what routes exist and will be interesting to take.
- Functional requirements:
 - Steering
 - Toggle between two cameras
 - Turn record on/off
 - Live map and volume estimates not a need.
- Drs. Rachlow and Conway usually take personal laptops into field, so interface software should not have special needs.
- May also want software to run on tablets.
 - As such, on-screen controls could be favorable to keyboard input.
 - This may also affect what hardware ports are available.
- Can deal with AC charging since battery life of 1hr is acceptable. Would prefer AC and DC charging abilities.
- Preferably on sight charging.

Data Needs

- Volume estimates are the lowest priority item. More of a wish than a need.
 - 10-15% error probably acceptable
- A line map is the greater need.

- Recorded video quality matters, as it will be used to count eggs, birds, and estimate ages of inhabitants.
- Only the currently viewed camera recording is needed - not both. It may be useful to indicate which one is being viewed in the recording, however.
- Measuring temperature is not a need. Can attach other small devices if desired.

Operating Environment

- Large drops not expected to be common in burrows except near entrance, where vehicle is still accessible.
- Sharp (such as 90°) turns are expected.
- Snags such as rocks, tree roots, and rodent skeletons can pose obstacle as well.
- Unsure if loops, halls, or large chambers in the burrows.
- Current return plan for the device is turning around, backing out, or pulling it out.
- Winter testing does occur, but clients are okay if device cannot be used in rain.
- Clients concerned that loose dirt may build up in front of the vehicle as it moves.
- There is some concern about the vehicle tipping over, but these instances should be rare due to the bottom-heavy design.
- Disturbing the animals is not a concern.