



Management & Monitoring Strategic Plan (MSP) Land Managers Meeting

November 14, 2018, 10:00 am – 12:00

San Diego Bay National Wildlife Refuge

Land Manager Updates

US Fish and Wildlife Service (John Martin)

- Released quino checkerspot butterfly larvae the first week in November

San Diego Bay National Wildlife Refuge (Eddie Owens)

- Good year for light-footed Ridgway's rail
 - 59 young released
 - Late clutches; might have one more release on January 23rd

San Diego River Parks Foundation (Shannon Quigley-Raymond)

- Conducted a large shot hole borer survey in the lower San Diego River
 - Partners: EHC, Forest Service, Natural History Museum, and County of San Diego
 - SHB traps set from El Monte Valley to Mission Valley Preserve (most impacted area)
 - 2 positive traps in Mission Trails Regional Park
 - Urged everyone to be extra cautious moving material (please see map on meeting event webpage for trapping results)
 - They will offer focused survey training

San Diego Zoo ICR (Charlie de la Rosa)

- Focusing on invasive plant management (*Oncosiphon piluliferum* and fountain grass) and on cactus wren

City of San Diego Public Utilities Department (John Barone)

- Working on 100 acre riparian restoration with River Partners. The project is going well.
- Awarded a 9th cycle Land Management Grant for cactus wren habitat restoration
 - Contracting with Urban Corps and Black Sage
 - Cactus being propagated off Highland Valley Rd.

California Department of Fish and Wildlife (Tracie Nelson)

- Propositions 1 and 68 are due December 16th
 - Anyone interested in submitting a proposal for a project at Rancho Jamul is more than welcome to

American Conservation Experience (Julia Parish)

- A national non-profit organization that provides field crews for conservation (trails/restoration) work
- Working throughout California to provide assistance to land managers

- Working with the Bureau of Land Management in Ridgecrest on OHV trail maintenance and restoration and three projects in the Cleveland National Forest (dam removal, trail maintenance).
- Working with the Back Country Land Trust in Alpine on an Arundo removal project and a desert tortoise monitoring project with the Desert Tortoise Preserve Committee.
- ACE uses volunteers from around the US and internationally to work on public & private lands
- They provide intensive trail &/or restoration training to volunteers (including herbicide use) and have national technical experts on forestry, trails and restoration.
- Volunteers who serve are eligible to receive an AmeriCorps education award

Escondido Creek Conservancy (Hannah Walchak)

- New 700 acre preserve (Mountain Meadows) through the Navy REPI program
 - 500 acres of chaparral and 200 acres of dead avocados and nonnative grasses near Deer Springs Road.
 - Restoration project
 - They would love any advice/ knowledge on nonnative grass restoration

Endangered Habitats Conservancy (Chris Manzuk)

- Wrapped up couple 100 acre acquisitions near Santee property
- CBI is working on the framework management plan
- Many California gnatcatcher present
- Added to the Lakeside Downs 450 acres and peripheral properties

UC San Diego (Isabelle Kay)

- Kendall Frost Preserve at Mission Bay: looking to protect the last 48 acres in Mission Bay
- People can learn about the plan at the ReWild Workshop (December 6th)
 - SD Audubon looking to expand wetlands and connect marsh to Rose Creek
 - UCSD campus would like to put an education center there
 - Need more support from the scientific community

Presentations (All presentations posted on meeting event page of SDMMP website)

San Diego River/ Fairbanks Ranch- Rancho Sante Fe Invasive Plant Removal and Stream Enhancement Project (Jonathan Appelbaum- San Dieguito River Valley Conservancy)

- Multiple partners involved with this project and focused on enhancing the river
- Goals of the project include:
 - Restore and enhance 181 acres over 2.5 miles of the Fairbanks Ranch area
 - Remove invasive species (arundo, pampas grass, palms, eucalyptus, etc.)
 - Decrease fuel levels
 - Land owner education: BMP for fuel reduction and native species
- Most of the project (90%) on private lands, but connected to Lusardi County Parks and conservation easement on Crosby HMA
- MSCP Covered Species: least Bell's vireo, California gnatcatcher, cactus wren, and quino checkerspot butterfly (host plant within Rancho Santa Fe Arroyo Preserve)

- Other target species: southwestern pond turtle and southern steelhead
- MSP Strategic Plans: Invasive Plant Strategic Plan, Fire & Connectivity Strategic Plan, and Monitoring Strategic Plan
- Citizen Science Monitoring:
 - Avian surveys – Palomar Audubon Society
 - Herp surveys – NAFHA/SWFA
 - Botanical Survey – Angelique Hermann
 - Wildlife Cameras – SDRVC
 - “Stacked Cube” Sampling – UCSD Intern Ryan Blaich
 - Drone-based Remote Sensing – Airspace Consulting, Inc.
- Coast to Crest Trail- proposed to go through project area – easement is almost finalized

San Diego EDRR (Jason Geissow – Dendra Inc.)

- Jason will continue to give more frequent EDRR updates at the meetings
- *Phytophthora* species
 - Impacts seen in California
 - Associated with nursery stock, especially in the Bay Area
 - Control measure for nurseries is to keep plants off of the floor so it doesn't spread to nursery stock
 - 40-50% of nursery stock infected
 - Seeing movement from suburban edge into wildlands
 - To manage it, you need to dig up the soil and solarize it
- Barbed goat grass (*Aegilops triuncialis*)
 - Found at Cuyamaca Lake
 - Fallbrook Naval Weapons Station- been controlled there for 10 years and eradicated
 - Found at CDF fire station in Cuyamaca
- Medusa head (*Elymus caput-medusae*) - be on the lookout for this
- Eupatory (*Ageratina adenophora*)
 - Found in San Diego River, Sweetwater below the dam, and Balboa Park
 - Report species when flowering and detectable
- Ward's ward (*Carrichtera annua*)
 - Large population on Bressi Ranch that Jason and his team will work on
 - CNLM working on small populations
- Spotted knapweed (*Centaurea stoebe ssp. micranthos*) – be on the lookout for this in higher elevations
- Ruby saltbush (*Encchylaena tomentosa*)
 - Found near Euclid and National City
- Carnation spurge (*Euphorbia terracina*)
 - Found on Black Mountain
- Bridal broom (*Genista monosperma*)
 - In Fallbrook
- Canary Island St. John's wort (*Hypericum canariense*)

- Mission Valley, Miramar, Lusardi, and Borderfield State Park
- European Sea Lavender (*Limonium duriusculum*)
 - Underreported
 - Found in uplands, marsh, and open riparian.
- New *Myporum* species found at Torrey Pines State Reserve
- Red sesbania (*Sesbania punicea*)
 - Riparian legume found in Tecolote Canyon
- Volutaria knapweed (*Volutaria tubuliflora*)
 - In Rice Canyon in Chula Vista

Using Drone Technology to Support Field Surveys (Brad Stein –ICF)

- Used a drone to monitor construction progress and classify vegetation types for a restoration project in the Otay River Valley
- In Washington they used a drone to find invasive plants based on flower color
 - Cost 50% less than traditional methods and had a higher accuracy
- In Central California they used drones to look for burrows
 - Surveyed 1,200 acres in eight days and detected 5,000 burrows
- After flying, the data needs to be processed, but several GB of data can cause an issue with computer processing
- LIDAR possible on larger drones
- Permits for drones:
 - Need FFA license
 - B4UFly App shows the project area and areas in green show where you do not need a permit to fly
- Land owner doesn't control the airspace from 200-400 feet
- Can only fly drones in line of sight and you can't fly where there are people
- Not really any wildlife protection standards
 - Avoid nesting season
 - Land managers need to scope in avoidance measures
 - Eddie Owens (USFWS) mentioned that the Migratory Bird Treaty Act and Endangered Species Act provide protections for take which would likely apply to drones, and getting a permit in place with USFWS may be required
 - Recommended that a biologist be out with the pilot to avoid disturbance
- USFWS doesn't allow drones on refuge lands, and State Parks doesn't allow drones
- Jasmine Baker (Helix) - may need to inform the surrounding neighbors and/or public about what you are doing so they don't see an approved contractor out using a drone and think that they are allowed to do the same thing
- Ken Devore (CDFW) shared that CDFW has 15 drones, a licensing program, and their own criteria in addition to the FAA requirements
 - They are conducting a drone test run on least tern
 - Have flown many hours without any problems
 - Incorporating full motion video that can integrate into GIS to do wildlife counts

- They've flown drones for various reasons, including: tree canopy, wetland, and SHB surveys
 - They have more issues with low-flying military aircraft
 - Also have issues with illegal access, so they will send someone out to first to check the property to make sure they are not flying with people nearby
- Tracie Nelson (CDFW) mentioned that her preserve has more issues with paramotorists (para gliders) flying low
 - She's seen them following deer and skimming treetops during nesting season
 - The FAA has told her that if it doesn't touch the ground, then airspace can be flown
 - There is a rule for federal land that applies to noise
- CDFW is interested in ICF's method for burrow mapping
 - Flew in the burrowing owl management area and they did not observe any flushing within 200 ft of burrowing owl
- Can thermal be used for monitoring bird species on nests, such as Ridgeway's rail?
- UCSD has a drone lab
 - They make their own drones with 3D printing
 - People can see it at the visualization lab
- Jasmine Bakker (Helix) recommended the book [Six-word lessons for Drone Pilots and Outdoor Enthusiasts: 100 lessons to make drone flights safe, ethical and green for wildlife and humans](#)
- From this discussion, it was determined that a drone workshop is needed for further discussion and to determine BMPs.

Modeling CSS and Chaparral vegetation life-forms – Emily Perkins (SDMMP)

- Emily gave an overview and update on this project. Projected completion is the end of 2019.

Closing Remarks

- The next MSP Land Managers Meeting will be held in March 2019 (exact date to be determined after poll)
- Looking for a room in north county that is large enough to host the meeting (about 50 people)
- If you are interested in learning about/discussing any particular topic at the next meeting, please let Sarah McCutcheon know, so she can add it to the agenda and try to arrange a speaker