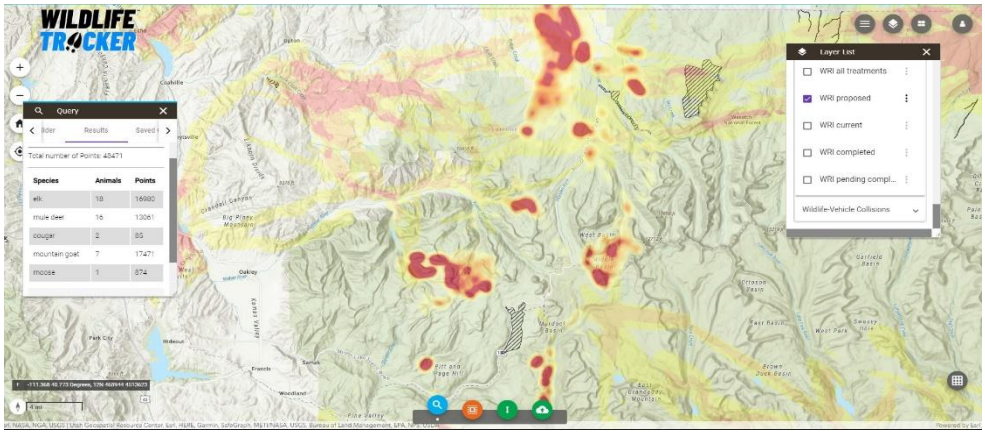
Guide for Including DWR's Wildlife Tracker Data in WRI Proposals

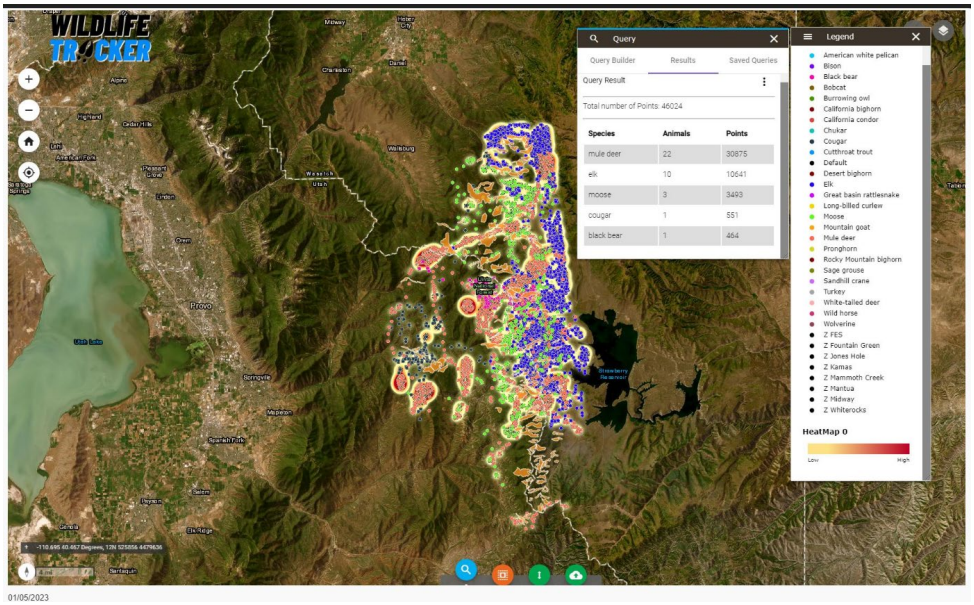
Maps made from Wildlife Tracker GPS collar location data can be very useful in prioritizing project location, defining treatment types and extents, and identifying pros & cons of proposed treatments in relation to known wildlife usage, among many other uses. WRI ranking process statewide allows for the use of Wildlife Tracker maps to fulfill the requirements of the Project Location and Timing scoring category. Project planners are increasingly using these resources, however, due to the diversity of habitat types, project goals, access and web page familiarity, professional backgrounds (eg. fuels vs animal behavior), agency workload, etc. there's not been a common baseline of information used for mapping and displaying the information available through Wildlife Tracker. This guide should help in establishing basic criteria for Wildlife Tracker usage as it applies to the WRI Regional ranking process. The goal is to create useful context with the mapped information and increase the objectivity of ranking as a result. For more information on how to use the Wildlife Tracker system please visit our YouTube page and watch the Utah Migration Initiative Training video. https://www.youtube.com/@UtahWRI

Should:

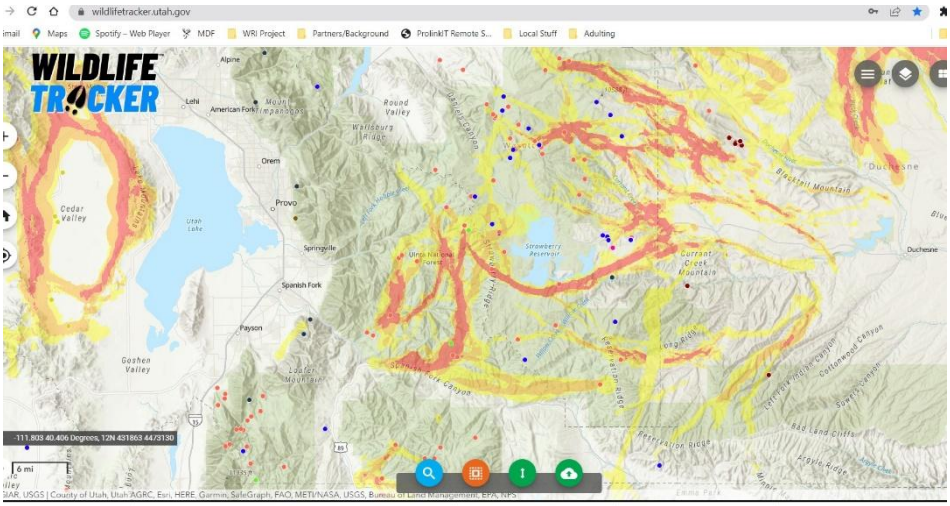
- Show project polygons and/or features/landmarks that are easily recognizable to those unfamiliar with the area, which give a sense of scale and geolocation.
- Consider several different scales to indicate extent of wildlife usage.
    - For example, a project area map supplemented by a larger scale map that shows the entirety of the migration corridor being addressed.
- Include a key, legend or supporting caption/text indicating:
    - Species represented (eg. dot colors for multiple spp; lek types; heat maps, etc)
    - Features represented (eg. habitat range map or corridor, land ownership, stream or road, etc)
    - Note that WT will often have this info in pop-out boxes after clicking on a feature, running a query, etc. Easy to incorporate in a screenshot.
- Time span used in queries.
    - If documenting seasonal use, please use a <u>minimum</u> of one full year for increased sample size. Migratory, semi-migratory, semi-resident ungulates and birds don't always travel to the same spots with each seasonal movement.
    - Indicate if collars presented appear to have an increased fix rate (eg. every 2 hours for a certain study vs. long-term survivorship 12-hr fixes). 360 dots in a month span ≠ 360 in 6 months.
- Compliment the project detail and context given by associated project pages.
    - Doesn't need to be standalone with all info, rather should visually demonstrate wildlife use that impacts the prioritization of regional projects.
    - Point out key features, timing, habitat type, species, etc. that reflect project goals or significance.
    - Use it to reflect institutional and professional knowledge used in project planning.



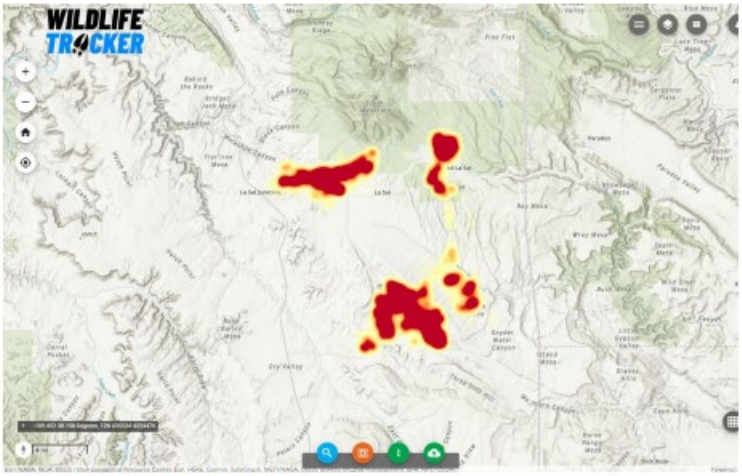
1: Multi-species use heat maps; 1-yr use, Oct-Oct. Mule deer mig corridors in the background.



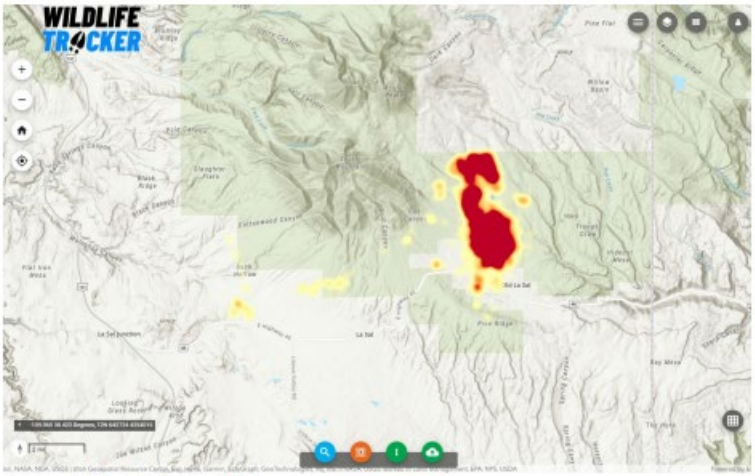
2. Large-scale context, labels, good supporting text on webpage; needs timeframe, heat map & dots redundant.



3. Mule deer migration corridors; Collar locs Aug 17; Elk - blue, MD - orange, Cougar - black, Bear - pink



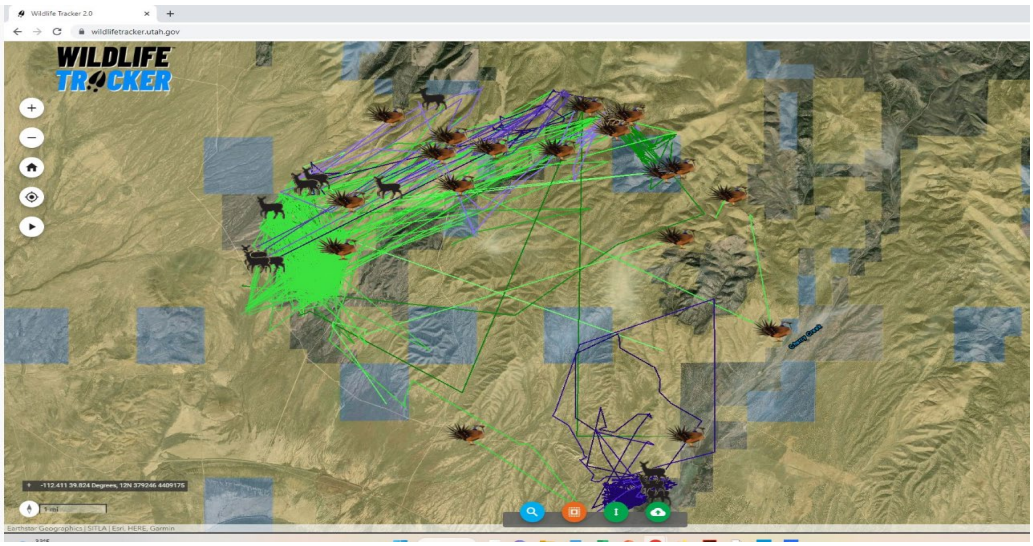
Winter 2021 mule deer use (24 collars)
Areas of concentrated use in the Thompson Flat, Ray Mesa and East Coyote area.



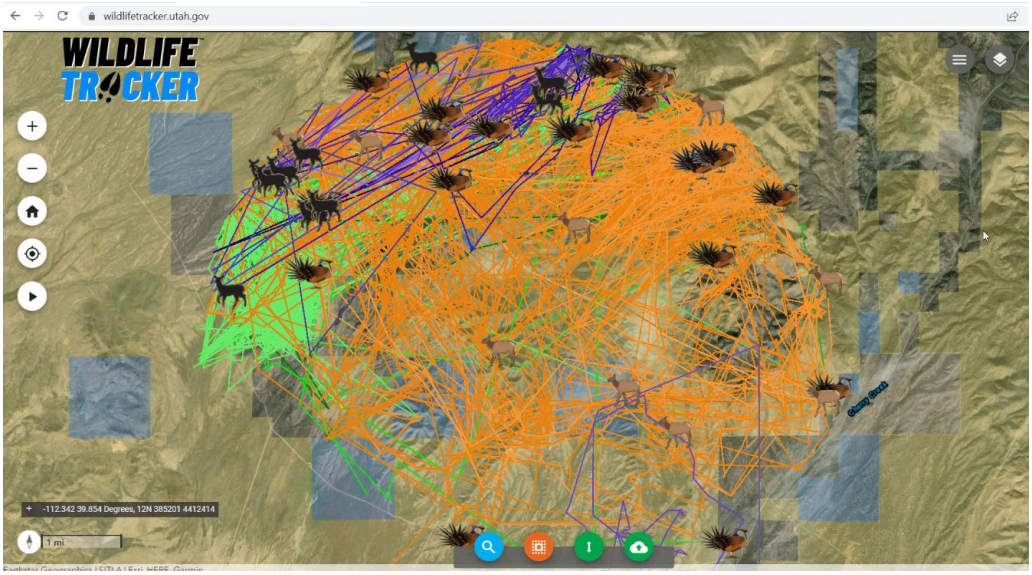
Summer 2021 mule deer use (16)
Area of concentrated use adjacent to the Deer Springs project area, which has potential as better deer fawning habitat. It has water, stringers of aspen and good cover, but needs reduction of woody material and an increase in herbaceous forage.

Should not:

- Offer only a “presence/absence” context for wildlife use in the project area.
- Cover project polygons with a rats’ nest of tracks or dots, especially without context. Is that one moose for 5 years? 15 deer in one month?
- Be overly cluttered or with layers obliterating other layers that are necessary for interpretation.
    - Use a few maps with similar extent/scale to show specific information such as species or corridors.
    - Use the opacity settings available in each Layer List feature.
    - Be redundant, such as dots covering their generated heat maps.
- Neglect to mention timeframe(s) represented.



4. No context of time or other parameters. Could add lek sites, SGMA, mig corridors, etc.



5. Very little interpretive value beyond presence/absence. Treatment area? Seasonality?