

## **Pre-FOP Willow Wash Traverse**

**Thursday 11/06/2014, 9 AM, meeting at the China Ranch store.**

**Day 0 Stop 1.** Optional Hike down Willow Wash. Leader: Matt McMackin (and Chris Menges)

Willow Wash is a major tributary of the Amargosa River draining from California Valley and the Kingston Range into this section of the Tecopa Hump highlands. Specifically, it flows in a steep-walled canyon from the Desert Bard Mill Site near Tecopa Pass to China Ranch. The canyon is an enjoyable and interesting transect approximately following the axis of the Tecopa Hump. Key outcrops provide insights in the geometry and geologic history of the Hump. Besides that, it's a nice hike, with prime bird watching in some seasons. So bring a pair binoculars.

If Chris Menges is able to join us, we will visit a site in the lower sub-basin in California Wash before starting the hike. He has a nice story with stratigraphy and luminescence dating for some of upper mid and Pleistocene groundwater-discharge beds preserved there that provide constraints on incision history and drainage integration.

The route descending into and down the canyon crosses a stratigraphic section from mid Pleistocene alluvium at the surface into Late Tertiary fanglomerates. The fanglomerate section is well exposed in a vertical cliff approximately 100 meters high. On the floor of the canyon we can inspect the pre-Tertiary basement and look at syn-depositional faulting at the contact with the overlying fanglomerate. Strath terraces and terrace deposits preserved in the Canyon are correlated with the downstream incision of the main channel of the Amargosa River along the Amargosa Canyon at China Ranch and upstream incision of basin deposits in California Valley upstream. Faults exposed in vertical canyon walls show the effects of waning faults over time where individual traces are cut off at successive unconformities. Partially eroded traces of human habitation from the 1930s and 1940s provide a timing reference to gauge current erosion rates.

This is one of my favorite traverses and I'd be happy to share it with any Friends who might be in the area a little early. The hike is approximately 6 kilometers from the starting point to the store at China Ranch. There are some steep slopes at the beginning, but most of the hike follows the floor of the wash.

The meeting place is located at the Date Shop at China Ranch at 9:00 AM on Thursday, November 6. There you can get fresh date bread and date cookies to add to your lunch if you wish. We'll set up a car shuttle from China Ranch Date Farm. Returning to the store in the afternoon, you can get a date milkshake. You can Google directions if necessary or contact me by email.

This is a hiking traverse, requiring the usual field items: appropriate clothing, a lunch, at least 2 liters of water, and sturdy boots. Most of the time we'll be walking either on trails or along the axis of a wide sandy wash. We will descend into the canyon following a trail formed by usage, steep in places, but not unusually hazardous. There are several easy exit routes from the canyon if you get botanophobic or claustrophobic.

John Caskey has raised a concern about particularly prickly patches of *prosopis* plants (mesquite) that prevented his passage on previous probes of Willow Creek. He said he wouldn't try it again based on his past experience. I've done the hike many times and don't think the mesquite is much of a problem. However, John pointed out that there are other valuable hikes in the region if you wish. (That's my disclaimer!)

Appropriate PPE are recommended. For the mesquite, that would primarily include a heavy coat (A Carhart hoodie is perfect), work gloves and some pruning shears for patches where we'll cut away enough mesquite for a prickle free passage. Our route into the canyon will avoid the dense mesquite, but clusters of mesquite may crowd our route in places. In those places, it's relatively easy to cut a strategic passage through the thickets. I'll be happy to lead and cut through any such obstructions, so if you're willing to follow, you won't need shears or even the heavy coat.

Please let me know if you'd like to join me. If no one responds, I might make other hiking plans, because John is right, that are lots of great hiking traverses in the region. This just happens to show some especially important and well-exposed attributes of the Tecopa Hump.

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Please contact me if you have any questions. Matt McMackin