

OFFICE MEMO

TO: Ed Morris Jason Harbaugh	DATE: 24 August 2009
	SUBJECT: Webb Tract visit - Aug 18, 2009
FROM: Kim Rosmaier	

Introduction

Staff took Nancy Quan, Maureen Sergent, and Ed Diamond (all SWPAO) to Webb Tract. This is not a vegetation monitoring survey; its intent is to provide the SWPAO staff with information on the condition of the fields.

Although unplanned, Dave Forkel (Delta Wetlands Asst Mgr) and Ralph Heringer (Consultant) and Tom Shapland (UCD) were also on Webb.

Tom Shapland had two persons with him, both of whom are going to take over the study due to Tom leaving for Spain for three months. At the roving station, SR2, Tom provided a brief discussion on the biometeorology concepts behind the surface renewal study.

Nancy, Maureen, and Ed were quite astounded by the vegetative condition of most of the fields as well as the poor results of the current discing activities.

Observations

Discing is ongoing but due to the extensive volume and bulk of the weeds, there is considerable vegetation that remains standing and uncut.



Weeds continue to be a problem on the island, especially in the southwest section of the island. This photo is taken from the east levee by Field 80, looking west, shows vegetation from east to west.



Finally, the following photo shows depth to moisture is approximately 5 inches at field 66, the location of the roving SR station (SR2). This field has remained somewhat clear of vegetation, although infill is occurring.



OFFICE MEMO

TO: Ed Morris Jason Harbaugh	DATE: 7 September 2009
FROM: Kim Rosmaier	SUBJECT: Webb Tract visit - Aug 20, 2009

Introduction

Ed Morris and I did a vegetation survey on Webb Tract on August 20, 2009.

Upon departure, we had the good fortune to meet up with Jaime again at the ferry. We discussed with him the current discing activities.

We first discussed the cost of discing on Webb Tract. He indicated the tractors use 12 gallons of diesel fuel per hour, discing for a ten hour day, currently discing 7 days a week with three tractors. If the island were to be kept vegetation-free, it would need to be disced continuously. To disc the complete island takes about two weeks. Assuming \$3.00 per gallon (according to the Energy Information Administration (U S Govt) the current cost of diesel fuel in California is 3.03) the fuel cost of discing the island would be approximately \$15,000 per cycle. This does not include the costs of transport of the fuel onto Webb, payroll and any additional costs.

We also discussed the discing activity. Due to the substantial size of the stalks of some of the vegetation (pigweed, cheeseweed, jimsonweed, and others) they need to use the 20ft disc which is heavier and is more effective; however, this also requires more time to clear a field when compared to the 28ft or 30ft disc. To keep the island clear, there should be continuous discing activity.

Observations

Field 62 was being disced. The area closest to the levee (from where the photo was taken) is the disced area. As can be seen, discing does not cut all the vegetation.



The weeds have continued to grow in both height and diameter of stalk.
The pigweed in field 79 are at a height of 5 to 6 feet



and the Johnson grass in field 101 is 4 to 5 feet



Field 64 was disced within the last week. Ed suggests we photo-document this site to provide a good example of regrowth of vegetation, due to the amount of vegetation left standing.



Fields 48 and 49 were also disced within the last week and today have been attributed as FF+nC, fallow field, not clear. This designation is necessary due to the poor results of the discing activity.



Field 23, the location of the base station, has undergone growth and the area around the base station is now completely vegetated, as is the fetch downwind of the station. This will influence the data at the SR1. This photo is looking west.



Field 66, the location of SR2, has had some growth but is still considered a fallow field by the surveyors. This photo is looking west.



For the next location of the roving SR, the researchers have requested a field that is heavily vegetated with Bermuda grass. Field 79 is attributed as NV, with primarily Bermuda grass in the south of the field and pigweed, Johnson grass, Bermuda grass, and jimsonweed in the north. This photo is in the southwest corner of the field, looking northeast.



This photo is in the north part of the field, looking east.



OFFICE MEMO

TO: Ed Morris Jason Harbaugh	DATE: 7 September 2009
	SUBJECT: Webb Tract visit - Aug 26, 2009
FROM: Kim Rosmaier	

Introduction

A new attribute was established today NV+D indicating the field is fully vegetated (NV) but is currently being disced (+D).

Observations

Field 75 was disced but large stands of Bermuda grass remain and the residue indicates the size of the stalks of the vegetation.



Field 23, location of base SR1 has full vegetation in the area of the station which will influence the data. These two photos were taken facing west, the wind direction.



The below picture of the field was taken while standing in the bed of the pickup in order to get another perspective of the vegetation coverage.



Field 66, the current location of the rover SR2 has undergone vegetative infill. The station will be moved from this location on August 27th.



The depth to moisture in this field at the location between the SR and the sonic anemometer was two inches.



The field attributed as T9+NV on 12 August 2009 has been disked.



OFFICE MEMO

TO: Ed Morris Jason Harbaugh	DATE: 7 September 2009
	SUBJECT: Webb Tract visit - Sept 2, 2009
FROM: Kim Rosmaier	

Observations

Jimsonweed is another weed growing throughout the island. The rover SR has been relocated to a field which contains jimsonweed, pigweed, Johnson grass, and Bermuda grass in the north end of the field and primarily Bermuda grass in the south end of the field.



It appears some fields have only been disked once during the study to this point. The southwestern fields at the ferry dock have remained fully vegetated. The top photo, taken July 30th (the 4th visit to the island) is the first time this location was photographed.



This next photo was taken today (September 2nd) and the field continues to be fully vegetated.



As stated in previous reports, the disking activity is not completely uprooting all the vegetation and residue which was not uprooted in a previous disking is able to regrow. Field 32 was disked last week but due to the poor disking the field was attributed today as FF-11, indicating the field is fallow with enough vegetation to also be considered partially idle.



Also, in the fields containing Bermuda grass, much of the Bermuda grass was not uprooted, as in the portion of Field 101 that borders Field 79.



Field 23, the location of the stationary SR, is currently being disked. The field is fully vegetated with pigweed. This photo was taken facing west next to the SR station. The tractor was disked this immediate area.



The weed growth was 3 to 4 feet tall with 90% canopy coverage.



This photo is looking north.

The rover SR has been relocated to the north end of field 79. The vegetation surrounding the station is 6 feet. This photo was taken at the height of the data logger housing, facing north.



This is taken at the station facing south, again at a height of 6 feet.



This is the station facing east. The cleared area is due to the researchers driving into the field from the east and crushing the vegetation.



This is the station facing west, the windward side.



The sonic anemometer, installed with the rover, is completely surrounded by vegetation.

