FIRST QUARTERLY REPORT F. Y. 1938

SENEY MIGRATORY WATERFOWL REFUGE

JULY, AUGUST, SEPTEMBER , 1937

(General)

Since the activities of the work units serving the Refuge are chronicled separately, observations made in this report are confined to offside remarks as to the general situation and a summation of the value of the work performed by the units mentioned.

Previously the writer has been too occupied by details to give the time to the proper analysis of the various factors of reasonable efficiency, or to attempt the necessary remedy in cases requiring adjustment. However, with the addition of recent permanent personnel, the situation is clearing up and it is hoped that future work programs and the administration thereof will receive closer attention.

It is not expected that the new Refuge clerk will be thoroughly acquainted with procedure for several months, but until he becomes the best informed man on the refuge, insofar as paper-work is concerned, he will be given plenty of opportunity to learn things while doing them. Beginning October 1 he will take over the fiscal work for all the refuge units and later will absorb other related functions. It appears, then, that we shall have in this end of the job some one to lean upon and thus find release for other equally important phases of the administration.

One of the chief burdens of the past has been encountered in lack of assistance of any kind at the refuge headquarters, or, when such existed, in the necessity of continually breaking in new and ever transitory personnel. The same has been true of the CCC unit, two superintendents having been employed within a year.

In the latter organization the same trouble encountered here is now manifested in the enrollee ranks, and Superintendent Sauer is badly

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handicapped in production by a rapid turnover of immature and inexperienced workmen. Undoubtedly the situation is reflected in other camps, and it is apparent that the days of relatively high output are gone forever. The nearest approach to reasonable efficiency in this type of work unit is found in the use of its machinery; but little talent for construction, sloping, chopping, and sawing, and work of like nature exists in the present crop of CCC youths. Consequently the supervision and facilitating costs are much higher per head now than formerly. We know of several persons who use a factor of .25 in setting up man-day production estimates.

A remedy for such a dilemma (if production is the goal) consists of vesting the supervisory head with authority to hire and fire, or/and, if possible, affording the camp superintendent (or camp commander, if a close cooperator) opportunity to help select his work company from eligible youths. However, it is quite obvious that the CCC camps are more or less utilized as incubators. In this role they may be justifiable and successful, though hard on the disposition and scant on world state, or local record production, as most foremen agree.

Possessed by unflagging enthusiasm and total lack of self-interest, a cooperative Army staff and a zealous Chief Foreman might jazz up unit work morale and in many cases develop individual talent. But such attributes are rare in the first place, and most assuredly are seldom found in combination or in immortal quality. As aforesaid, too, the material is too young, which is the chief handicap. It is our opinion that the Camp Germfask supervisory and facilitating personnel is giving the Bureau a fair break.

(Progress: July 1 to October 1, 1937)

Quite a number of items which were scheduled for completion since the summer of 1936 are still visibly in their previous status, noticeably the disposition of several hundred tons of amorphous delivered to the refuge in the spring of '36. The south road and resurfacing of the north entrance road are still incomplete. A considerable quantity of timber remains in the flooded pools of Unit I, which should rightfully be removed this year. The wigwams have been standing a year within a couple of man-months of being ready for occupancy. Our landscaping program, like the others mentioned, has been temporarily shelved because absolute necessities have received priority. Obviously our project estimates have been altogether too optimistic.

Assisted in some degree by the WPA's, the CCC camp has achieved several noticeable pieces of work in the three months covered by this report. One of these items was the completion of the telephone project scheduled for the current summer, providing service between the fire tower, Camp Germfask, the Germfask telephone line, and the refuge switchboard.

In spite of protracted delays due to breakdowns and difficulty in getting repair parts for the excavators, considerable progress has been made on the north pool in Unit 2. Weather permitting, this dike should be completed by November 15. Though less than half the yardage expected has been realized, production records show that, when operating, the machines average about the same amount each week and thus have reached peak individual capacity. We are somewhat mollified to observe that the pool under construction will provide 2000 acres of water area, or two-thirds as much as is provided by the nine pools in Unit One. Excavation and grade costs, inclusive of CCC labor, are estimated at 6 ¢ per yard, which compares favorably with current commercial costs.

About ten miles of split fence posts, spaced twelve feet, were set up along the east boundary, and a mile and a half of this line was finished with a five-strand barbed wire. Said posts were butt treated at the refuge tank.

The refuge headquarters buildings, including the residence, were redecorated. The improvement is apparent. Additional space was provided at the residence by converting the open porch to a bedroom. No adverse comments have been reported as to its attractiveness.

One of the most important achievements of the summer has been the establishment of nuclei plantings of various duck foods in all the pools in Unit 1. Various pondweeds (largely sago), bulrush, duckweed, wild celery, and watershield were gathered from local sources and transplanted. The celery, of course, was purchased from a commercial supply house.

The goose pool, subject of some criticism, though begun somewhat late in the period, has advanced considerably toward completion. The camp is doing a nice job of riprapping the discharge cut, and the result will be worthy of putting on a Christmas card. Cleaning up the stubble in the pool bottom is behind schedule due to lack of man power and to the CCC boys' ineptitude with an ax. Mr. Sauer believes he can just beat the cold weather deadline on this project.

The foundations for the east wing of the refuge equipment shed has been completed. Weather and other unpredictable events permitting, the entire foundation and the granary floor should be in and protected against frost by November 15.

No attempt is made to list unimportant items, maintenance or fire-fighting, it being assumed that they have been reported otherwise and can not be classified as progress.

(Wildlife)

Although it is not felt that Unit 1 will reach its zenith as an attractive ducks habitat for another two years, the situation is not viewed with alarm. We remember two broods of teal and a half dozen or more conspicuously small flocks of mallards of 1935. In 1936 some run-off water remained in the low sag in the east portion of E pool and this and some of the borrow pits produced an aggregate of 1100 ducks. In July and August of this year the biologist's nesting reports conceded 5000 or more ducks as the summer population. However, as these broods began exploring the place, conservative visual inspections double the estimate, and early fall activities of the birds more than confirmed the count.

The Unit provided little in the way of the esteemed duck foods until late August, when the sago plantings in pools F and E proved their worth and withstood rather drastic foraging. Millet and grain plantings along the dikes also headed out in profusion and without a doubt were of great value in keeping the local birds on the refuge during the time when they characteristically wander about the country.

With reference to food preferences not covered in the above paragraph it had been observed that mallards, black ducks, and geese were fond of upland grain plantings, millet, wild rice, sedge seed, and particularly of minnows. Of the latter it may be said that the numbers are countless, and when disturbed they create ripples in the shallows such as are commonly caused by a strong breeze. Herons and kingfishers have increased rapidly here in consequence, as well as mergansers. It is anticipated that other fish-eating ducks will increase in proportion. Only one duck specimen has been taken to date, a black duck. From its stomach twenty-six minnows varying from one and a half to two inches were taken. The balance of the stomach contents consisted of sedge seed with a very small quantity of millet.

Black ducks and mallards were observed feeding in the sago beds in remote portions of the pools, and but seldom in similar beds in open waters. Teal, however, were tipped up among these pondweeds at all times and in all places, apparently not particularly cover conscious. Teal also seemed to be the only species making use of the extensive beds of water smartweed. We note that deer have been foraging on the upland variety of this plant, ~~pennsylvanicum~~ *polygonum* muhlenbergii.

Few fall migrations have been noted up to October 1, those observed being depletions of the local population. All the blue winged teal, except those which have become more or less domesticated, left the refuge about September 15. Fifty per cent of the black ducks, mallards, and pin tails took departure about September 28. Fall flights of green winged teal, geese, and jacksnipe have not occurred in quantity.

Of the diving ducks, up to October 1, only several hundred lesser scaup have rested at the refuge, although at this writing the amounts are considerably increased. One night migration was observed by the writer, consisting of 2500 birds believed to be of this species, though antedating any other record of local arrivals by several days. The migration consisted of a mass of flights, spanning roughly one quarter by two miles and providing something in the way of a climax of two years of fire fighting.

Other cheering phenomena are found in that the three broods of local Canadian geese have flocked together and, though capable of taking flight, choose to remain here, visiting the headquarters periodically for a bit of grain. Five of these, reared at the refuge headquarters, have been banded and may provide interesting information if they prove migrant. Two other broods have been reported on several occasions, but are believed to have gone completely wild and will in all probability be shot during the open season, since they

nested off the refuge and have not returned to the safety provided here.

(Biological Improvements)

Efforts in the promotion of vegetative growths were confined in the greater scope to the fixation of dike surfaces to check erosion and eliminate maintenance of these expensive structures. Previous to November 1, 1936, due to the nature of construction contracts, we were unable to do any planting of this kind, but the desired planting was achieved this year.

Practically all plantings proved successful. Of the grain seedings, barley, wheat, oats, duck millet, and buckwheat headed out satisfactorily. Both of the latter and panicum will apparently reseed successfully and in quantity.

Aquatic seedings of sago and other pondweeds, a small quantity of wild rice, scirpus, and three square from local sources responded satisfactorily. None of these have as yet been secured in adequate amounts to fulfill maximum requirements, but nuclei stands have been established in each pool. 1937 plantings, other than the above-mentioned, consist of the introduction of wild celery in the deepest sections, and two large acreages of wild rice, the latter being concentrated in this principle in pools J and E so that ultimate stands will be spaced for restriction, experiment for tolerance of water conditions, and observation of species preference as to habitat, range, and dissemination.

Twelve bushels of wild rice has been stored in a natural spring in the locality and will be planted in the goose pen and in the upper pool in Unit 2 in the spring. An exhibition patch will be established in the upper show pool, also, to provide necessary eyewash for the public.

As stated in a previous report, the attempt at a nursery for shrubs did not pan out. One reason was our inability to provide the necessary man-power and equipment to maintain it while carrying on other more important work. Experiments made with seed plantings will be attempted this fall in lieu of

the nursery practice. If successful, they will be carried on in greater scope in following years. A great deal of ground can be covered in a short time in this manner. We seem to have plenty of ground. Accumulations of mountain ash, rosaceae, juniper, dogwood, alder, sumach, cedar, nannyberry, and various cherries are under way for this purpose. Consideration will be given to known elements of adjacent cover, seasonal preference, dissemination, and species in making these plantings.

Spring plantings will involve the use of fifty per cent of the available man power and include at least all of the area involved in Unit 1, pool plantings and some upland spot plantings in Unit 2. Dike plantings in Unit 2 provide a problem, since no peat has been found in sufficient quantity to afford surface protection on these dikes. Hay will be hauled to these during the coming winter and stacked in piles for use there following a seeding of spring grain, mixed with various soil binders.

(Allotments)

Under this heading, the situation seems to be satisfactory, though the refuge allotment is somewhat too small to permit the proper maintenance of equipment and buildings and also provide for supplies and miscellaneous purchases necessary for the WPA unit. At present expenditures are restricted to current essentials.

(Personnel)

The various personnel seems adequate and satisfactory. Especially appreciated is the new refuge staff, to which will be delegated specific functions and responsibilities.

(Administration)

It has been difficult at times to find compromise between relative

efficiency and full compliance with government organization. As any old army dog knows, a super-organization offers something in the way of a buck-passer's paradise and tends to abate personal initiative. Local policy, stressing production and teamwork, seems the only answer. Barking executives and affectation of surface efficiency (often accompanied by delusions of grandeur privileged by federal employment), common in certain types of supervision, are generally lacking, and satisfactory ends are achieved by informal conference.

The assignment of permanent refuge personnel establishes a pendulum and provides desirable stability to the organization. With experience, association, and time, the local group will be able to get along all right.

To make a point in this connection, our fire fighting experiences of the year revealed satisfactory evidence of personal initiative in both prevention and suppression. Cognizance of the general problem and the parent set-up was not apparent, however. Next year we shall have a dispatcher, less combustible material, and the benefit of fuller understanding. Fortunately few fires were to be coped with this past season. Otherwise, cooperation of local personnel has been entirely satisfactory.

(Maintenance)

Except for maintenance of equipment, government buildings, and water control structures, little has been done in this connection. To bring previously built constructions in condition as good as new fully half the men and equipment in the CCC camp would be required. Obviously, when the refuge has been completed and the WPA's and CC's have gone to the respective limboes, fifteen or twenty men will be required here on a semi-annual program for this and other purposes.

(Property)

Land acquisition is progressing steadily, and the status map is assuming

solid color. No buildings of any permanent value have been acquired.

(Predatory Animals)

Populations of predator seem normal, with coyotes more in evidence these last two months than noted in the past two years. The refuge patrolman has been assigned to take care of the population in Unit 1. Efforts to catch village dogs running deer have been unsuccessful, and it is expected that they will be shot, at least in cases of repeated offenses.

(Housing)

Housing for permanent personnel seems to be in order. There are several available sites, conveniently dispersed. Salvage of two CCC camps, coupled with available logs, stone, and other materials should provide economical sources of supply. However, it is doubtful that the available men will be able to do more than one a year.

(Public Relations)

As stated in previous reports, John Public has given us approval. Some of our antagonists have reversed fronts and drop in occasionally, seeking advice on duck foods and other problems related to attracting game birds. This seems to be a smart move on the part of sportsmen and if carried to extreme will offset the refuge effectiveness as protective habitat during open seasons.

(Reconnaissance, Plans, Research)

Such work as has been done under this heading has been necessarily conducted as needed. It is hoped the coming winter will enable us to project our needs, plans, and intentions on paper.

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