

B. (Health and Sanitation)  
5. ( Sanitation)

30 Sept 47

Palau District

(a) Field inspection trips made during the period covered by this report areas follows:

- NGARDMAU District, Babelthaup (3 Hamlets) 10 July 1947.
- NGARHELONG District, Babelthaup, (4Hamlets) 15 July 1947.
- NGHESAR District, Babelthaup, (3Hamlets) 22, 23, July 1947.
- MELEKIEOK District, Babelthaup, (5Hamlets) 13, 14, August 1947.
- NGIUAL District, Babelthaup, (1 Hamlets) 15, August 1947.
- NGARAAD District, Babelthaup (5 Hamlets) 16, 17 August 1947.

- (b) Native Sanitary Inspectors.  
No change since last report.
- (c) Native cemeteries.  
No change since last report.
- (d) Pest Control.

Insects:

(1) Flies: All garbage houses on the station are sprayed once weekly with 5% DDT solution in kereosene or diesel oil. All pit type privies on the station as well as those located at the schools and churches are sprayed with 5% DDT solution once weekly. All native owned pit privies on Koror and Arakabesan are sprayed once monthly by the sanitation crew, using a 5%DDT solution. Either DDT in xylene or kerosene and sprayers have been issued to every hamlet in the Palau and instructions given to the hamlet sanitation laborer (so designated and paid by the hamlets or district) to spray each pit toilet and every pog pen at

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least once a month and more often if subsequent inspections show more frequent spraying to be necessary.

On Koror, because of the large numbers of persons using the privies at the dispensary, school, churches, shop areas and enlisted men's barracks, it has been necessary to treat these toilets once weekly, but on different days, with an application of paradichlorobenzene and a solution of penite-6 40:1 strength, in an effort to maintain them free of flies.

Fly infestation is on the increase in areas infested with the Giant African land Snail. The increase is quite pronounced on Koror where large numbers of green bottle flies may be observed feeding on the dead snails that have been crushed on the roads and trails. In addition, large numbers of snails are dying in their shells without visible evidence of injury and considerable fly breeding is occurring in these carcasses. Present limits of control measures are inadequate to effectively combat this condition.

A new problem in fly control was encountered during the <sup>trochus?</sup> tr\_h fishing season. It is estimated that nearly 1,000,000 shells were collected during August and the first week of September and in many instances, due in part to ignorance on the part of some individuals, and in part to an old custom, many shells were left piked along the shore line above high tide mark until the animal contained in the shell had decomposed enough to facilitate cleaning of the shell. In each instance where this was observed the shells were heavily infested with fly larvae and swarming with adult flies. Instructions were issued to all natives engaged in trochus fishing to bury their catch in the beach sand

at the end of each working day.

Lectures on fly control are given to the inhabitants of each hamlet during field inspection trips.

Fly control in the pit privies located at the enlisted men's barracks, dispensary and school is proving to be very difficult because of the large numbers of persons using these facilities. It is hoped that these can be replaced in the near future with a water carried sewage system.

(2) Mosquitos: Mosquito infestation is on the increase on Babelthaup, Koror Arakabesan and Peleliu despite all efforts to control breeding. The numbers of man made breeding places left on these islands by both the Japanese and American combat forces are tremendous, and in many instances inaccessible due to jungle growth which has grown up in areas formerly inhabited.

Continuous effort is maintained toward eliminating these breeding places and at the same time, to prevent additional breeding places from being established, however, the task is great and cannot be completed with present facilities and labor force for many months yet.

Also as has been reported in previous sanitary reports, the pitcher plants on the high islands continue to breed increase numbers of mosquitos.

Control methods currently employed are draining and filling spraying with DDT solutions, puncturing open drums and tanks and flattening and burial of tin cans.

Lectures on mosquito control are given to the inhabitants of each hamlet during field trip inspection.

An important find, relative to mosquito control was made this week when a large concrete cistern containing a very large number of Gambusia fish was discovered in an area which had just recently been cleared off in preparation for construction of church property. These Gambusia, imported by the Japanese, have survived in a concrete water storage cistern for over two years, has had the water added to only by the rainfall which fell directly into it. It contains considerable debris, including several old oil drums, and these fish are undoubtedly a very hardy species to have survived for this period under such unfavorable conditions. Within the next week a program will commence for stocking other cisterns, large bomb craters and brackish pools, as an aid in mosquito control.

(3) Rodents: Rat and mouse traps have been issued to every hamlet in the Palaus. On Koror, poison bait campaigns, using Barium carbonate for bait, have been fairly successful. Red squill is on requisition and will be delivered to outlying areas along with instructions for its use when received. Three day trapping campaigns every two weeks, on Koror, continue to average a 10% catch.

(4) Giant African Land Snails: Present in large numbers on Koror, Arakabesan and western areas of Babelthaup. Babelthaup districts infested are: Airai, Aimeliik, Ngnetpang, Ngerem lengui, and Ngerdmau. Present on Peleliu. Many dead snails and many empty but apparently undamaged shells observed in the infested areas.

(5) Other Insects:

Ticks: Cattle which survived the war on Koror and Babelthaup are heavily infested with ticks.

(e) Potable Water Supply.

(1) Little change has occurred in the station water supply since the last report. A series of breaks in a water pipe and trouble with a water pump during the first ten (10) days of August and interrupted normal operation of the main galley as well as creating shortages in the enlisted men's berthing area and one section of dependent housing area. No additional water storage facilities were established, however, a hook up as established between former Japanese water system and the smaller system, whereby, in emergency water from the large filtration plant can be used to augment the small system now supplying the main galley, enlisted men's berthing area, the enlisted men's dependent area, the native operated laundry, the fire and police station, and the Commanding Officers quarter.

(2) Water supply for native consumption: In the villages, rain water continues to be the principal source of drinking water. Tobi has two small wells of good condition. Angaur has an excellent deep well with a treatment plant. Many villages on Koror, Arakabesan and Babelthaup also obtain drinking water from well, springs, streams. However, the schools in many districts are in need of assistance in developing an adequate water supply.

(3) Hot water supply for station facilities: The dispensary and the main galley still lack an adequate hot water supply. Work was begun on installing hot water tanks at the dispensary during the quarter, neither are in operation yet. When in operation these should furnish an adequate supply of hot water for the dispensary.

The hot water supply for the main galley, where approximately 100

men are fed at each meal, consists of one (1) twenty gallon, kereosene heated tank.

(f) Sewage disposal:

(1) Good cooperation has been given by the native inhabitants of all hamlets and islands in the construction of satisfactory toilets. Excellent progress has been made in the past two quarters. On Koror, the present system of exereta disposal by pit privies is inadequate at the enlisted men's barracks, the dispensary and school. In these three areas nine(9) pot privies provide sewage disposal for more than six hundred people daily. This \_\_\_ rate of use necessitates frequent moving of toilet sites. Six (6) new toilettes having been constructed at the dispensary alone in the last nine (9) months. A water carried sewage disposal system is needed in these areas.

(g) Violation of Sanitary Regulations.

None