Back-to-Office Report Sultanate of Oman 2-14 June 1994

K. Cressman Locust Reporting and Forecasting Officer, ECLO

Summary

No Desert Locusts were seen during ground surveys carried out by the author in the interior and coastal areas of northern Oman. No significant rainfall has fallen this year and temperatures have been unusually high. Consequently, breeding conditions are not favourable and no major developments are expected in the near future. The author trained a total of 14 new plant protection officers in the field. The author visited the newly opened, but not yet operating, Locust Centre and held discussions at the Ministry of Agriculture and Fisheries regarding remote sensing systems and HF radio communications; these issues need to be followed-up by FAO/ECLO and RNEA.

Assessment of locust situation

At the request of the Government of the Sultanate of Oman, the author carried out ground surveys and training in the interior desert areas (Sharqiya, Wahiba Sands, Jalaan and Dhahira) and coastal plains (southern Batinah) of northern Oman (see map).

No Desert Locusts were seen during the surveys. As a result of high temperatures and no recent rainfall, ecological conditions were very dry in all areas. In fact, vegetation was nearly absent on the interior plains and had already dried up in the low lying wadi areas as well as along the coastal plains. The only exception was in Jalaan where small patches of green *Tribulus* sp. and small clumps of *Panicum* sp. were present in five wadis along a 40 km stretch of survey (W. Salabah to W. Shakli). This was the same area where swarms arrived during July 1993. The green vegetation is probably a result of rains that fell in April but is starting to dry up.

Throughout northern Oman, daily maximum temperatures were above average and rains have been below average during this past winter and spring. Hot weather came earlier this year than most years. During the mission, temperatures reached 52°C in Nizwa and Muscat. Apart from one night during the second half of April when rain fell in parts of Sharqiya and Jalaan of the north-eastern interior where Wadis Batha and Sal were seen flowing, no other significant rains have been reported this year.

On 8 June tropical cyclone 03A was off the central Oman coast. The following day, the Oman Meteorology Department reported that the cyclone decayed to a low pressure system after crossing land between Masirah and Dhofar. Only dust storms occurred in Sur and no rains were reported. The system then moved south-west to the Wadi Hadhramaut area of eastern Yemen on the 9th and 10th. Tropical cyclones are unusual weather events that occasionally bring heavy rains to central Oman and can be associated with locust upsurges such as in July 1967.

Based on the above, locust breeding has not occurred this year in northern Oman and hence, no significant populations have developed that could threaten South-West Asia this summer. No evidence could be found indicating that a migration occurred from the Indo-Pakistan summer breeding areas last year to Oman apart from about a hundred solitary brown/yellow adults reported in Qurm (Muscat) last December. This combined with a lack of locusts seen during the mission suggests that there has not been any significant locust infestations in Oman since last July. Since breeding conditions are unfavourable in northern Oman and should continue unless some unusual rains occur, no major developments are expected before the end of the year. Furthermore, the tropical cyclone appears not to have affected ecological conditions.

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cc: de Haen, AGD van der Graaff, AGP

> Hafraoui, ECLO Cressman, ECLO de Montaigne, ECLO

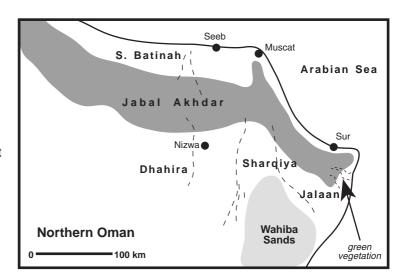
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Training

During surveys to assess the locust situation, the author trained a total of 14 Omani Plant Protection officers. Most of these officers were in their 20s and 30s and had a university education in general plant protection but very little training or practical experience in Desert Locust survey, reporting and control. However, whatever they lacked in experience, they made up for it with enthusiasm and a desire to learn. Training was carried out in the field on the following subjects:



- · locust biology and behaviour
- locust population dynamics
- · locust habitats
- map and compass reading
- survey (sampling) methods
- importance of surveying & reporting
- use of GPS

Recommendations and follow-up

Locust surveys and reporting

Locust officers should continue to remain vigilant in all areas especially in view of the current difficulties in Yemen where the locust situation remains unmonitored and there is a possibility of favourable breeding conditions in some areas of the Yemen interior. Officers should check any areas in Oman in which rains are reported.

The author discussed the use of forms for reporting results from locust surveys with the Locust Director. It was agreed that Locust Officers would field test a modified version of the form presented at the last session of the FAO Commission for Controlling the Desert Locust in the Near East (identical to the one currently used in Egypt).

Training

With the completion of this and previous training, a cadre of trained officers exists which should be sufficient for surveys and control during recessions and periods of small locust outbreaks. However, incountry training implemented by national staff and supported by ECLO and RNEA should continue on a regular basis to maintain the readiness of this cadre. Additional training is required in English.

Locust Centre

The author visited the newly completed Locust Centre near Seeb. The two-story complex consists of a Director's office (with fax), assistant office (with copier), information office for three officers (with map and equipment storage, HF radio, display), meeting room for 12-16 people (with audio-visual equipment), sleeping quarters for nine people, lab, library and kitchen. Outside is separate storage for other equipment and parking for landrovers.

Unfortunately, the Government has not yet approved the budget required for staffing the Centre due to economic constraints. Consequently, the Centre is not operational nor is it expected to be before 1995. It would be very desirable that the Centre become operational as soon as possible so that a regular locust monitoring programme can be established and sustained.

Remote sensing

Simple and inexpensive PC-based satellite systems can be used to monitor vegetation conditions in Oman. Having information indicating which areas are green would significantly reduce the total area that must be checked for locusts. The author provided information about such systems and recommends the installation of a system in the Locust Centre. This was met with a favourable response although MAF raised a concern regarding the funding for the purchase of the system.

As mentioned during the author's visit to Oman in May 1993, the purchase of a meteorological satellite receiving station should be investigated. These stations are simple and inexpensive, allowing the monitoring of potential rain-bearing clouds and could supplement the above system. The station could be installed in the new Locust Centre.

Radios and GPS

There continues to be some difficulties with HF radios installed in the locust vehicles, making vehicle-to-vehicle communication nearly impossible. Local technicians indicated that only the installation of a series of repeater stations can overcome these difficulties. As this is not feasible and has not been required in locust-affected countries in Africa where HF communications function well, the problem should be further explored perhaps with technical assistance from RNEA. Otherwise, field communications will continue to suffer and make control campaigns very difficult to organize and implement effectively.

Each locust officer should be provided with a GPS, a compass and maps. Additional GPS units may be needed to supplement the current order placed by MAF for five Magellan Trailblazer and four Garmin model 75 GPS units. Without these, it is nearly impossible to accurately locate the position of locust infestations.

Acknowledgments

The author is grateful to those people in the Ministry of Agriculture and Fisheries (MAF) who helped to organize and participated in the surveys and training which made this mission extremely enjoyable.

Persons Trained

Dhahira
Ali Rashed Al-Abri
Said Saleh Saif Al-Azri
Ameen Mayoof Harib Al-Hinai
Hamed Salem Suleiman Al-Hinai
Ahmed Hamood Salem Al-Mahrooki
Juma Said Khalfan Al-Obaidani
Salam Adeem Salam Al-Saigi
Salam Salem Al-Salami
Ahmed Naser Salman Al-Shariani
Saif Said Zahor Al-Tobi
Suleiman Said Ali Al-Yahyai

<u>Southern Batinah</u> Mohamed Magdy Badr

Sharqiya Saif Hameed Saif Saif

Other Persons Met

Ali Saif Al-Abri Director, Agriculture Affairs, MAF Mahmoon Al-Alawi Director, Locust Unit, MAF Saleh Ali Al-Hinai Director, Plant Quarantine, MAF

Itinerary

0.004	
3.6.94	arrive Muscat
4.6.94	MAF discussions, Locust Centre
5.6.94	Sharqiya & Wahiba Sands surveys
6.6.94	Sharqiya & Jaalan surveys
7.6.94	Nizwa & Wadi Bahla surveys
8.6.94	Adam & Wadi Halfayn surveys
12.6.94	southern Batinah surveys
13.6.94	MAF dicussions
14.6.94	depart Muscat