



# **Emergency Prevention System EMPRES**

## **Desert Locust Component**

### **Strengthening Desert Locust management**



# FAO's response to the Desert Locust problem

Because of the nature of the Desert Locust problem - long periods of recession followed by explosive growth in locust populations, rapid migration and widespread threat to crops - FAO has evolved a three-pillar approach to assisting affected countries.

## Strengthening national capacity

Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES), established in 1994, is FAO's development arm for Desert Locust control. Its programme strengthens early warning, early reaction and research through work with national locust control units and plant protection services. Eventually these EMPRES activities will be taken over by the regional locust commissions. This brochure describes in detail the work of EMPRES.

## Locust commissions

There are three regional locust commissions, covering Northwest and West Africa (CLCPRO), the Red Sea countries (CRC) and Southwest Asia (SWAC). Their task is to build national capacities, provide training, encourage survey and control operations and assist in coordinating locust campaigns. The commissions, which are administered by FAO with secretariats in Algiers, Cairo and Rome, meet annually and are funded by the concerned countries. In addition, FAO is advised by the Desert Locust Control Committee (DLCC), composed of affected countries, donors and other agencies, on Desert Locust management, training and information issues.

## Monitoring and emergency response

FAO's Locust and Other Migratory Pests Group, based at the Organization's headquarters in Rome, monitors Desert Locust activity in 30 countries. Within the Group, the Desert Locust Information Service (DLIS) receives field reports on locust numbers and movements from affected countries, which it combines with satellite and historic data to forecast locust activity and warn countries. It publishes bulletins, alerts and updates.

During emergencies, the Group expands to become the Emergency Centre for Locust Operations (ECLO), which coordinates locust control campaigns by informing the international community about the locust situation, launching appeals for international assistance and procuring and organizing delivery of pesticides, equipment and technical assistance.

## Contact:

Locust and Other Migratory Pests Group

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# Desert Locust: biology and habits

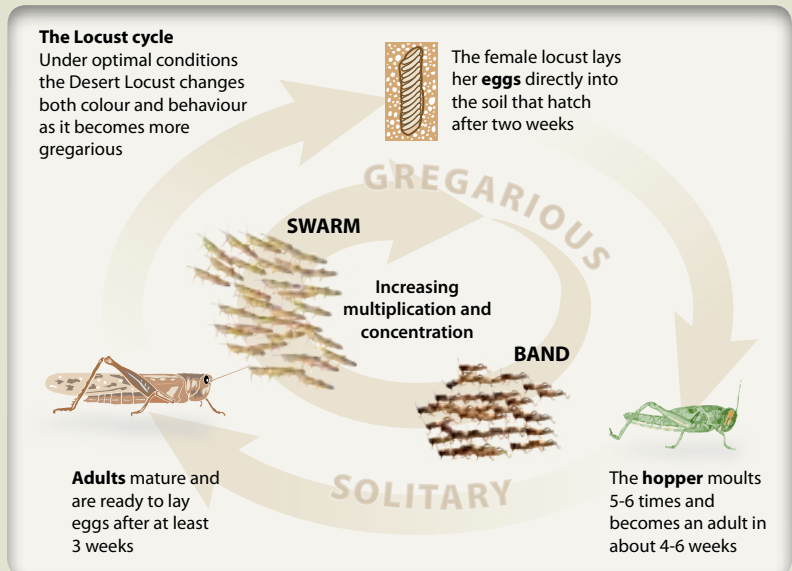
Desert Locust swarms have posed a serious threat to crops and grazing in Africa, the Near East and Southwest Asia since farming began. The irregular appearance of these swarms is called a locust plague and the years between plagues are referred to as a recession period.

Desert Locust are well adapted to their changing environment and are highly mobile, flying many hundreds or even thousands of kilometres between their summer, winter and spring breeding areas.

During recessions locusts are found at very low densities in the desert (see map) in a solitary phase. When rainfall creates favourable breeding conditions, the locusts can multiply rapidly and gregarize. This means they act collectively, forming marching bands of hoppers (wingless larvae or nymphs) and swarms of adults. Apart from the changes in their behaviour, the solitary and gregarious forms of the Desert Locust differ also in colour and shape.

Effective control is difficult to achieve because locusts breed in remote areas that receive rainfall. Since rains are irregular, patchy and unpredictable it is not easy to find these areas and organize control operations.

Plagues develop when locusts find ideal conditions in a sequence of seasonal breeding areas. This leads to rapid multiplication and increasingly large swarms,



which also invade neighbouring countries outside the recession area (invasion area, see map). The swarms may cover several hundred square kilometres during plagues and contain 50 million locusts in each square kilometre. Crop damage by such swarms can be extensive since a square kilometre of insects can consume about 200 tonnes of vegetation or crops a day.

Preventive control aims to break the breeding sequence by intervening as early as possible against gregarious populations. This means that well-directed and correctly implemented surveys are necessary to provide information on the location, behaviour, maturation and density of infestations and to allow early warning and rapid treatment in a safe and effective manner.

