

## FAO DESERT LOCUST BULLETIN No 132

### GENERAL SITUATION DURING AUGUST 1989 FORECAST UNTIL MID OCTOBER 1989

**The continuing heavy rains in several parts of West Africa, notably Adrar des Iforas in Mali, Tamesna and Air in Niger, and west-central Mauritania, have created excellent conditions for continued summer breeding. This could constitute the beginning of another upsurge, so every effort should be made to detect and destroy any infestations which may result. However, the infestations will not in themselves pose a threat of significant crop damage.**

Summer breeding is in progress in the Sahel of West Africa. A few small mature swarms were seen in late July in south-eastern Mauritania and in the Tilemsi Valley of Mali where egg laying is expected to have occurred. During August, scattered adults were reported from Mauritania to western Sudan. Hopper populations were reported in a few areas of south-eastern and central Mauritania, central Mali, and Tamesna of Niger. Breeding is almost certainly occurring in other areas such as the Adrar des Iforas of Mali, Air of Niger, and central Chad. All of these areas have received good rainfall in July and August as suggested by ARTEMIS and METEOSAT imagery and confirmed by field reports. Although hopper populations have only been reported in a few areas of the Sahel, it is expected that small scale breeding is occurring over a wide area where good rains have recently fallen. Fledging is likely to be in progress already on a small scale in some areas and will become more widespread with a few small swarms forming in September and October.

In early August, two swarms were seen in western Sudan where egg laying is expected to have occurred in areas of recent rainfall and green vegetation. Resulting populations are likely to be overlapping with fledging and small scale swarm formation occurring in September and October. Some of these populations may begin to move westwards from western Sudan and eastwards from central Sudan in October. Breeding is also likely to be in progress in Eastern Sudan near the Ethiopian border where heavy rains fell in July and August.

In late July, two swarms were seen in the highlands of Yemen AR and a mature swarm was seen laying in the Tihama of Yemen AR in late August. Scattered locusts were also reported in the Tihama of Saudi Arabia and in the southern Hadhramaut of Yemen PDR and hopper groups in the Yemen AR highlands during August. ARTEMIS and METEOSAT imagery indicate that good rains have fallen during the past three months in the region so small scale breeding is likely to continue in the Tihama and highlands of Yemen AR and the interior and coastal plains of Yemen PDR.

Three mature swarms were reported in Pakistan and subsequently controlled although egg laying is thought to have occurred over a substantial area. Scattered adults were present in Rajasthan of India and breeding was in progress.



## WEATHER AND ECOLOGICAL CONDITIONS

During August, the ITCZ was located north of a line defined by Noudhibou-Atar-Tessalit-Bilma-Faya-Geneina-El Fashir-Karima-Port Sudan. Cyclonic circulations were observed from western Mauritania to eastern Niger. Rains associated with the ITCZ were generally heavy and of short duration over most Sahelian areas.

In the first half of August, good rains fell in central and southern Mauritania: Nouakchott received 46 mm, Kiffa 152 mm, Tidjikja 39 mm, Tintane 49 mm, Boutilimit 54 mm, and Tamecheket 30 mm. ARTEMIS and METEOSAT satellite imagery suggest that rain may have occurred up to 24°N with isolated rainfalls near Bir Mogrein and western border areas and in the El Djouf region of north-eastern Mauritania and north-western Mali. As a result, ecological conditions are favorable south of Nouakchott-Tidjikja-Aratane to the Senegal and Mali borders.

ARTEMIS imagery indicates good rainfall north of Tombouctou east to Timetrine, Adrar des Iforas and the Tamesna of Mali. Heavy rains were reported in the Adrar des Iforas up to the Algerian border on 18-19 August. Tessalit received 124 mm (annual average is 118 mm). Numerous wadis in the Adrar des Iforas and the Boureissa basin were reported flooded in mid-August. Good rains were reported in the Niger River basin at Tombouctou (38 mm) and Mopti (103 mm) and also in south-western Mali during the month.

Good rains were reported in western Niger during the month. Agadez received 41 mm. ARTEMIS and METEOSAT imagery indicates that good rains occurred in the Tamesna and the Air throughout August. Wadi Anou Makarene was reported flooded over more than 90 km west into the Tamesna. Surveys indicated that other wadis up to 1920°N were flooded in the Air and vegetation was developing in Air and Tamesna.

ARTEMIS and METEOSAT analyses indicate that good rains occurred in Kanem, Batha, Biltine, and BET (near Fada and Faya) regions of Chad during the first two decades of August. Abeche received 224 mm, Biltine 101 mm, Adre 162 mm, Fada 57 mm, Kalait 43 mm, and Rig-Rig 100 mm. Green vegetation was reported south of Fada to Biltine, south and west of Abeche, and from Abeche to Adre.

In Sudan, rainfall was primarily concentrated south of a line defined by Geneina-El Obeid-Khartoum while weak rains were reported to the north. Ecological conditions were reported favorable south of this line; while they were becoming dry further north. ARTEMIS imagery indicates heavy rainfall in eastern Sudan along the Ethiopian border and in the central Ethiopia Highlands.

ARTEMIS imagery suggests that rains occurred in the Asir mountains of Saudi Arabia and the highlands of Yemen AR and south-west highlands of Yemen PDR. METEOSAT satellite imagery indicates a substantial cloud mass over the southern Tihama coast from Jizan to Mocca on 24-30 August.

Low pressure systems continue to produce south-west to west humid winds over summer breeding areas of Pakistan and India during August. Good rains were reported in Rajasthan at Jodhpur on 20 August (23 mm) and Bikaner on the 22nd (23 mm) and 28th (27 mm) and in Pakistan at Chhor on the 25th (56 mm). Ecological conditions are expected to be favorable for breeding in those areas.

## AREA TREATED IN AUGUST 1989

PAKISTAN  
YEMEN AR

approximately 800 ha  
in progress over an estimated area of 3200 ha



## DESERT LOCUST SITUATION

### WEST AFRICA

#### MAURITANIA

Late reports in July indicate that scattered adults were found in the Hodh Gharbi south of Aioun El Atrous at Tamourt El Ghabe on 19 July and near Djigueni (1544N/0840W) on the 26th. There were also unconfirmed reports of hopper groups at Boutlehiya (1559N/0949W) on the 27th and third instar hoppers at Boumeiyah (1612N/0913W) on the 28th. Copulating adults were seen in the Hodh Chardhi on 50 ha west of Nema at Rhais Sas (1646N/0759W) on the 20th and an isolated mature female was captured north-east of Nema at Gleib Lezrag (1711N/0633W) on the 22nd. In the Akle Aouana dunes, there were unconfirmed reports of hopper groups at Agmeiminat (1744N/0612W) and El Arch (1625N/0609W) on the 27th. On the 30th, there were unconfirmed reports of some swarmlets along a track 7-50 km north-east of Oualata (1748N/0724W).

On 2 August, scattered mature adults with a maximum density of 5 per ha, were reported west of Nema at Tayarett El Wasa (1630N/0758W). On the 4th, a single adult male was seen 40 km west of Timbedgha (1615N/0810W). A few mature adults were reported near Djigueni on the 5th. During the second half of August, scattered adults were reported at six locations north-east and south-east of Aioun El Atrous.

There were unconfirmed reports of hoppers east of Nema near the border with Mali at 1650N/0620W and 1820N/0600W and south of Aioun El Atrous at 1612N/0913W in the first two weeks of August.

In Inchiri, isolated adults were reported on the 9th at Lemdene (1919N/1431W) and Lakhlid. In Adrar, hoppers were reported at Lebheir (1950N/1242W) over an unspecified area on 13 August. These hoppers are likely to be derived from breeding reported at the same area in early May that matured and bred following rains in mid to late July.

Scattered adults were seen in the Senegal River Valley at Maghama (1531N/1251W) on the 14 August.

#### SENEGAL

In late July and early August scattered mature adults at a density of 6-8 per ha were seen on 6 ha in the irrigated perimeters of Golere (1615N/1406W) and Galoya (1605N/1351W) in the Senegal River Valley. Other scattered adults were reported in Liguere District.

**MALI**

In central Mali, late reports were received of mature swarms at Ersan (1655N/0012W) on 21 July. Some scattered adults were reported in late July near Gossi at Oussadia (1550N/0018W) on the 24th. Scattered adults and hoppers with a maximum density of 200 per ha were observed on 1 ha south of Gossi at Bangui-Mallen (1524N/0122W) in early August. Scattered adults were also reported near Gourma and south of Gao along the Niger River during August.

In northern Mali, mature swarms were seen at Tassaout (1925N/0038E) in the northern Adrar on the 26th. A group of adults was also reported from the Tilemsi. Surveys during August reported scattered adults in the Adrar at Wadi Tessalit (2020N/0052E). No further details were available.

**NIGER**

In early August, there were reports of third to fifth instar hoppers in Tamesna and scattered adults at In Afer (1748N/0540E). Scattered locusts were also reported in the Air in mid August. No further details were available.

**CHAD**

Scattered adults were reported in the Kanem region of western Chad from late July to the end of August. In mid August, scattered locusts were present in green areas near Kamkalaga 45 km south-west of Moussoro (1339N/1629E). During the first half of August, immature adults with densities of 10,000-20,000 per ha were reported in the Batha (14N/19E) region. Surveys in early and mid August did not reveal any locusts west of Abeche, between Abeche and Adre, south of Adre, north of Abeche to Fada, and south-east and north-east of Fada.

Third to fifth instar hoppers previously reported at Dopdopdop (1337N/2008) were confirmed to be tree locusts.

**NORTH-WEST AFRICA**

**No information regarding locusts had been received from countries in the region up to 31 August.**

**EASTERN AFRICA****SUDAN**

In late July, surveys in the White Nile and Northern Kordofan provinces between Kosti (1310N/3240E) and El Obeid (1311N/3015E) and near Berber (1802N/3400E) in the Northern region reported the situation to be calm.

In Northern Darfur, some scattered locusts, with a maximum density of 5 per ha, were reported within an area of 20,000 ha south of El Fasher at Abu Zureiga (1317N/2518E) during the first week of August. One mature swarm was seen flying near Dar Daafa (1524N/2637E) on the 7th. The following day it was seen on the Teiga Plateau and was reported to have split into two. There were unconfirmed reports of eggfields south of Malha at Saiyuh (1415N/2540E) and Madu (1420N/2600E). On the 15th, an immature swarm was reported from Dar Daafa. No further details were available.

Surveys in Northern Kordofan reported the situation to be calm. There were unconfirmed reports of locusts in the Eastern region at Derudeb (1732N/3609E).

**ETHIOPIA, DJIBOUTI, SOMALIA, KENYA, UGANDA, and TANZANIA**

The Desert Locust situation was calm up to 20 August.

## NEAR EAST

### **KINGDOM OF SAUDI ARABIA**

Scattered adults were reported in the Tihama near Jizzan at Ahad El Masarha with a density of 200 per ha in late August.

### **YEMEN ARAB REPUBLIC**

There were late reports of two swarms seen in July. These were clarified as one 7 km by 4 km immature swarm seen north-west of Sada (1407N/4426E) at Sagein on 7 July and a 5 km by 2 km immature swarm seen in the Al Juba (1515N/4517E) and Marib (1525N/4521E) area on 25 July. The swarms were believed to have dispersed.

In early August, there were reports of adult groups in the Highlands; however, no further details were available. From 12-22 August, first to fifth instar hopper groups and fledglings were reported over an area of 1000 ha in the southern Al Jawf and over an area of 1200 ha near Al Juba. Ground control operations were in progress.

In the Tihama, a mature swarm was seen copulating and laying over an area of 1000 ha in Wadi Mawr north-east of Zuhrah (1544N/4300E) on 25 August. Ground control was in progress.

### **YEMEN PDR**

In mid August, scattered locusts were reported at Hadhina (1423N/4740E) and Khazma (1425N/4730E) in the southern Hadhramaut.

**No information regarding locusts had been received from other countries in the region up to 31 August.**

## SOUTH-WEST ASIA

### **PAKISTAN**

In July, a late report indicated scattered adults present in the summer monsoon breeding areas with a maximum density of 2,250 per sq. km. at Lumbowaro (2650N/6841E) in the Nara Desert on the 30th.

In August, a 2 sq. km. swarm of medium density was seen laying at Drigga (2538N/6644E) in Lasbela district on the 8th. Two mature swarms of medium density, 4 sq. km. and 2 sq. km., were reported laying at Makora (2543N/6642E) and Jerai (2530N/6644E), respectively, near Uthal in Baluchistan on the 10th. These were reported to be controlled. However, egg-laying is suspected to have occurred over an estimated area of 600 sq. km. Baiting operations were carried out over the area.

### **INDIA**

Late reports received indicate that isolated adult populations were present in a total of 21 localities in Bikaner, Barmer, Jodhpur, Ganganagar and Churu districts of Rajasthan and Kutch/Bhuj district of Gujerat during the first half of July. A maximum density of 750 adults per sq. km. was reported in Churu at Chinpura Chota (2849N/7522E) on 3 July and in Jodhpur at Sekhasar (2717N/7213E) on the 28th. In the second half of July, scattered adults continued to be reported at a total of 40 locations in the above mentioned districts with a maximum density of 3,750 adults per sq. km. reported at Phalsund (2624N/7156E) in Jaisalmer on 31 July.

In the first half of August, scattered adults were reported at 22 locations in Bikaner, Barmer, and Jaisalmer districts of Rajasthan. A maximum density of 2,250 adults per sq. km. was reported at Tokla (2729N/7244E) on 2 August. Breeding was observed at 6 localities.

**NEW ASSISTANCE REQUESTED**

No new requests for assistance have been received.

**NEW ASSISTANCE PROVIDED**

As reported in Desert Locust Update 16/89, the following countries have pledged assistance to **Guinea Conakry**:

**Germany:** **300,000 DM**

- 10 trucks
- 5 large sprayers
- 50 motorized sprayers
- 50 manual sprayers
- 1000 protective overalls
- some base radios

**Japan:** **300-400 million Yen**

- Pesticide and sprayers



**ANNOUNCEMENTS**

No announcements for the month of August.



**FORECAST UNTIL MID OCTOBER 1989**

## WEST AFRICA

### MAURITANIA

Breeding on a moderate scale may be in progress over wide areas of southern and central regions. Resulting hopper populations may be difficult to detect within the vegetation.

Fledging, which is likely to be in progress on a small scale, will continue during the forecast period with the likelihood of a few small swarms forming.

### SENEGAL

Small scale breeding may be in progress resulting in low numbers of hoppers with fledging commencing in September.

### MALI

Breeding on a moderate scale may be in progress over wide areas that have received good rains in July and August such as the Adrar, Tilemsi Valley, Tamesna, and central Mali. Resulting hopper populations may be difficult to detect within the vegetation.

Fledging will continue during the forecast period with the likelihood of a few small swarms forming.

**NIGER**

Breeding on a moderate scale may be in progress in Tamesna and Air where good rains were reported in late July and August. Resulting hopper populations may be scattered and difficult to detect. Fledging will commence in September with the possibility of a few small swarms forming.

**CHAD**

Small scale breeding may be in progress in Kanem, Batha, Biltine, northern Ouaddai, and Ennedi regions in areas which good rains have fallen in late July and August. Resulting hopper populations may be scattered and difficult to detect. Fledging will commence in September.

**GAMBIA, GUINEA BISSAU, GUINEA CONAKRY, BURKINA FASO, and CAMEROON**

No significant developments are likely and no invasions are expected.

**NORTH-WEST AFRICA****MOROCCO**

It is possible that a few small swarms may invade south-eastern areas of the country toward the end of the forecast period.

**ALGERIA**

A few small swarms may invade southern and central regions toward the end of the forecast period.

**LIBYA**

A few small swarms may invade southern areas toward the end of the forecast period.

**TUNISIA**

No significant developments are likely and no invasions are expected.

**EASTERN AFRICA****SUDAN**

Breeding on a moderate scale is likely to be in progress in Northern Darfur and on a smaller scale in Northern Kordofan. Resulting populations are likely to be overlapping with fledging and small scale swarm formation continuing throughout the forecast period. As vegetation dries, some of these populations may begin to move westwards from Darfur and to the east from Kordofan at the end of the forecast period. Breeding is likely to be in progress in the Eastern region near Kassala.

**ETHIOPIA**

Some scattered adults may be present in Eritrea and on the Red Sea coast where small scale breeding may occur in areas that previously received rainfall.

**SOMALIA**

Small scale laying may have occurred during August in the extreme western part of the northern coast. Resulting hoppers will be scattered and difficult to detect.

**DJIBOUTI, KENYA, UGANDA, and TANZANIA**

No significant developments are likely and no invasions are expected.

## NEAR EAST

### **KINGDOM OF SAUDI ARABIA**

As conditions become favorable, breeding should commence along the southern Tihama north of Yemen AR.

### **YEMEN ARAB REPUBLIC**

Breeding will continue along the Tihama as a result of good rains in August. Fledging will commence from early October onwards with the possibility of a few small swarms forming thereafter. Breeding in the Highlands is expected to be on a small scale with very slow development as temperatures continue to decline.

### **YEMEN PDR**

Small scale breeding is likely to have occurred and continue in the interior and along the coastal plains. Fledging could commence in early October.

### **BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, OMAN, QATAR, SYRIA, TURKEY, and UAE**

No significant developments are likely and no invasions are expected.

## SOUTH-WEST ASIA

### **PAKISTAN**

Breeding will continue during the forecast period in Bahawalpur. Resulting hopper populations may form small bands, fledging towards the end of the forecast period. Numbers may then decline as adults start to migrate westwards.

### **INDIA**

Small scale breeding is likely to be in progress and continue during the forecast period in Rajasthan and northern Gujarat, with hopper groups forming. Fledging may commence and a few small swarms form towards the end of the forecast period. Numbers may then decline as adults start to migrate westwards.

### **IRAN and AFGANISTAN**

No significant developments are likely and no invasions are expected.

*1 September 1989*



# Desert Locust Summary No. 132

## Criquet Pèlerin : Résumé No. 132

