

FAO DESERT LOCUST BULLETIN No 133

GENERAL SITUATION DURING SEPTEMBER 1989 FORECAST UNTIL MID NOVEMBER 1989

The general Desert Locust situation has remained unexpectedly calm during the past month. Despite adequate rainfall and good ecological conditions in many areas, there is no evidence suggesting an upsurge in West Africa as previously forecast. Only small scale breeding has occurred in West Africa and western Sudan, and only low numbers of adults and hoppers are present. Fledging should be complete by mid October and small scale migration of these adults into winter breeding areas on a limited basis is expected during the forecast period. Small scale breeding is in progress on the Tihama coast of Yemen AR. In Pakistan and India, a few hopper bands were reported following earlier laying by swarms.

Scattered hoppers and adults were present in central Mauritania in very small numbers in areas where previous small scale breeding had occurred. No further breeding has been detected during September in Mali, Niger, or Chad. If breeding did in fact occur but was missed in these areas, it was on a small scale producing very low numbers of hoppers. Existing populations may persist and breed again on a small scale since ecological conditions are likely to remain favourable in some wadis. This is likely to be the case in central Mauritania, the Adrar des Iforas of Mali, southern Tamesna of Mali and Niger, and southern Air of Niger. All of these areas received moderate to heavy rainfall in August and early September. However, as vegetation becomes dry, numbers will decline in these areas as scattered adults move northwards on a small scale toward the Hoggar Mountains of Algeria and south of the Atlas Mountains in Morocco.

Scattered adults persisted in western Sudan; however, no further breeding was reported during September. Population numbers will decline as adults migrate to winter breeding areas of the Red Sea coast. Breeding was reported on the Tihama in Yemen AR and may be in progress on a small scale along the southern Tihama of Saudi Arabia. Breeding may continue, resulting in a small increase in overall locust numbers.

If the unconfirmed reports of swarms in northern Somalia are indeed Desert Locusts, the swarms will move south toward central and southern Somalia before they begin to lay.

A few small swarms and scattered adults were present in India and Pakistan in late August. Subsequent breeding was reported resulting in hopper bands and some scattered hoppers. A few small swarms may form. However, the monsoon season is coming to an end so further breeding is unlikely. Population numbers should decline as adults move out of the area toward Baluchistan.



WEATHER AND ECOLOGICAL CONDITIONS

During September, the ITCZ began its southward movement. This was associated with the southern extension of a high pressure system over Libya extending further south. In the central and eastern Sahel, the ITCZ was located between 11-15°N by the end of the month. However, in the western Sahel, the ITCZ position varied due to an unstable low pressure system centred over northern Mauritania and Mali. As a result, rainfall in the Sahel was considerably less than the previous month. During October, the ITCZ will continue to move south with rain likely to decrease in Sahelian areas. Winds are likely to be predominantly south-east from central Sudan and northern Chad to northern Niger and southern Algeria under the influence of the southern edge of the Libyan high pressure system. In North-West Africa, eastward moving low pressure systems will likely result in increasing winter rainfall in Morocco and to a lesser extent in Algeria. Winds will be from the south-west to the south-east.

In Mauritania, ARTEMIS and METEOSAT imagery suggested that moderate rains may have fallen in the south-west regions of Trarza and Brakna during the first decade of September, with light rains during the second decade. Nouakchott received 53 mm, Tafounde 73 mm, and Aleg 82 mm during the first half of the month. As a result ecological conditions are likely to be favourable for Desert Locust breeding south of a line Nouakchott-Tidjikja-Nema; however, vegetation is likely to become dry during the next two months. Light to moderate rains fell further north near Akjoujt and Tamchakett, 27 mm each, and Atar, 9 mm. ARTEMIS imagery indicated the presence of some patches of vegetation between Ouadane and Aghouedir.

ARTEMIS and METEOSAT imagery suggest that light to moderate rains may have fallen in central Mali, the Adrar des Iforas, and the southern Tamesna of Niger. During the first half of September, Gao received 27 mm, Tombouctou 37 mm, and Tessalit 5 mm in Mali, and in Niger, Agadez received 6 mm. Vegetation remains green in most wadis in the Adrar des Iforas and southern Tamesna and the Air of Niger as a result of the heavy rains in August. However, conditions were reported to be very dry with little vegetation further north. Heavy rains were reported in south-western Mali and Niger.

In Chad, ARTEMIS imagery suggested light rain fell in the Kanem region near Mao with heavy rains in regions south of Ndjamena and Abeche. Ndjamena received 63 mm and Abeche 58 mm during the first two decades of September. In Sudan, significant rainfall was concentrated south of a line El Geneina-El Obeid-Khartoum-Kassala. El Fasher received 87 mm, El Geneina 28 mm, and El Obeid 21 mm during the first decade of September. Ecological conditions were reported to be favourable in some areas of western Sudan but dry in the north. Existing areas of vegetation are likely to become dry during the next few months.

ARTEMIS and METEOSAT analyses indicate that moderate rains may have fallen during September in the Asir mountains of Saudi Arabia and the highlands of Yemen AR, and to a lesser degree on the Tihama. Heavy rains were reported on the northern Tihama of Yemen AR from Wadi Mawr to Midi during the first decade of September.

Moderate rains fell in Rajasthan and near the Pakistan-India border in early September. Jaisalmer received 29 mm on the 2nd. As a result, ecological conditions are expected to be favourable in these areas. In October and November, winds are likely to be from the north-west to the north-east due to a high pressure system centred north of Rajasthan. Hence, rainfall should decrease during this period.

AREA TREATED IN SEPTEMBER 1989

India	ca. 300 ha (August)
Pakistan	800 ha (August)
Yemen AR	details not available



DESERT LOCUST SITUATION

WEST AFRICA

MAURITANIA

In late August individual adults and second to fourth instar hoppers were present north-west of Aioun El Atrous (1640N/0937W) to Tidjikja (1833N/1125W). On the 27th, nomads reported the presence of hoppers in northern Mauritania north of Zouerat (2242N/1230W) at Guelb Jrad and east of Bir Mogrein at Sfeiya (2516N/1105W).

During the first half of September there were several reports of individual adults and hoppers in central and southern Mauritania north of Nema, near Tintane, between Aioun El Atrous and Tidjikja, and near Kiffa. Nomads reported scattered adults on the 1st at Bir Sagga (1722N/1107W), hoppers at Guelb Boumdeid (1728N/1119W), and hoppers and adults at El Behriya (1722N/1117W) on the 7th. Adults were reported over 2100 ha, with a density of 35-45 per ha, at Dimalla (1729N/1102W) on the 5th. Fourth instar hoppers and adults were present south of Tidjikja on the 9th. Adults were seen west of Kiffa at Tamourt Aghouawit (1644N/1121W) on the 11th, at El Mamoune (1724N/1045W) on the 13th, and at Sanghou (1701N/1002W) on the 15th.

MALI

On 6 September, immature and mature adults were reported at Gao. In south-eastern Mali, copulating adults were seen near Menaka over 300 ha at Tin Amassine (1530N/0212E) and Albou (1634N/0224E) in early September. In the Adrar des Iforas, there was an unconfirmed report of adults along 7 km in Oued Tefit (2003N/0206E) on 20 September.

NIGER

Individual adults were seen north-east of Termit Massif at (1615N/1117E) during the first week of September. Surveys in mid-September detected a few solitary adults in central and north Tamesna from In Abangharit (1754N/0603E) west to the Mali border, north to Assamakka (1921N/0538E), and south-west to Tassa Takorat (1730N/0528E). Other areas of Tamesna were reported clear. In the Air, a few scattered adults were seen in mid-September.

CHAD

The situation was reported calm in Chad up to 21 September.

NORTH-WEST AFRICA

MOROCCO

There was an unconfirmed report of day-flying locusts in southern Morocco moving north at Bir Tandos 125 km north-east of Nouadhibou (2055N/1703W) on 14 September. No further details were available.

No locust information had been received from other countries in the region up to 30 September.

EASTERN AFRICA

SUDAN

A late report was received of a 1 sq. km. mature swarm seen in the Northern region at Abu Dom (1827N/3147E) on 16 August. This may be the same swarm reported from Northern Darfur in early August. In Northern Kordofan, adults mixed with first to third instar hoppers were present within an area of 3,000 ha near El Obeid at El Hashaba (1332N/3007E) on 19 August. Surveys during the third week of August found scattered adults north of Sodiri at Jebel Handaliyat (1555N/2811E). No locusts were found during surveys in the Eastern Region near Kassala up to 31 August.

In early September scattered mature adults were seen in Northern Darfur at Umm Buru (1502N/2343E) on the 2nd, and Karnoi (1506N/2314E), Boba (1528N/2325E), and near the Chad border at El Malam (1555N/2455E) on the 3rd. There was also an unconfirmed report of swarms near the Sudan-Chad border on 3rd September. No further details were available. In mid September, surveys found no locusts in Darfur north of El Fasher and in the Northern, Central, and Eastern regions.

ETHIOPIA

During the first week of September, helicopter surveys in Akele Guzai and Seraye districts south-east and south-west of Asmara respectively, near Keren, and along the Red Sea coast from Massawa to Mersa Cuba (1629N/3915E) did not detect any locusts.

SOMALIA

There were unconfirmed reports of swarms in northern Somalia at Las Khoreh (1110N/4815E) on 24 July and at Erigavo (1037N/4722E) on 18 August and 6 September. No further details were available.

NEAR EAST

YEMEN AR

On 10 September, hatching was reported at 4 locations north-east of El Zuhra on the Tihama. Control operations were in progress, but no further information was available.

KUWAIT

The Desert Locust situation was reported clear in July.

IRAQ

The Desert Locust situation was reported clear in August.

No locust information had been received from other countries in the region up to 30 September.

SOUTH-WEST ASIA

PAKISTAN

During the first half of August, scattered adults were present at densities of 75-3,000 per sq. km. in Lasbela and Turbat of Baluchistan and in Tharparkar, Nara, and Cholistan deserts.

During the second half of August, there was an unconfirmed report of a swarm near the Indian border at Thum (2853N/6955E) on the 26th. A 6 sq. km swarm was seen laying at Islamgarh (2750N/7050E) in the Cholistan desert on 28th. On 23-27 August, hatching commenced near Uthal in the Lasbela district and first to third instar hopper bands were reported within an area of 113 sq. km. Control operations were in progress with 800 ha treated by the end of August. Scattered first to fifth instar hoppers were reported within an area of 3 sq. km in the Lundiwaro and Nawankot areas of the Cholistan desert. Scattered adults were present in Lasbela, Tharparkar, Nara, and Cholistan with a maximum density of 9,000 per sq. km at Behawala Toba (2748N/7040E) on 31 August.

INDIA

On 29-30 August, two small immature swarms, 0.5-1 sq. km in size, were found and controlled in the Jaisalmer district of Rajasthan. Control operations were also carried out against hopper infestations on 300 ha. in Jaisalmer and Bikaner districts.

AFGHANISTAN

The situation was reported clear from June to August.

No locust information had been received from other countries in the region up to 30 September.

NEW ASSISTANCE REQUESTED

No requests for assistance for Desert Locusts had been received up to 30 September.

NEW ASSISTANCE PLEDGED

As reported in Desert Locust Update 17/89, **Mauritania** reported receiving the following assistance for locust control in 1988-89:

Morocco:

- 6 Land Rovers equipped with exhaust nozzle sprayers, 3 with base radios
- spare parts for the Land Rovers
- 15,000 l of Malathion 96% ULV
- 40 sets of protective clothing
- camping equipment for 3 survey/control teams (of 6 persons each)

Canada (through OCLALAV):

- 3 million CFA for ground surveys

Italy:

- 5,000 l of fenitrothion 500 ULV
- 56 tons of fenitrothion 1.5% + fenvalerate 0.3%

India:

- 2,200 l of Malathion 25 ULV



WEST AFRICA

MAURITANIA

Scattered adults may continue to breed in areas of green vegetation in the central region. Residual populations may be augmented by adults coming from the east. However, as vegetation conditions deteriorate, some adults will move north toward winter breeding areas.

MALI

Scattered adults may breed on a very small scale in areas of green vegetation along wadis in the Adrar des Iforas and in the Tamesna and central regions. However, as vegetation conditions become dry, some adults will move north or west on a very small scale.

NIGER

Scattered adults may breed on a very small scale in areas of green vegetation in the Tamesna and along wadis in the Air. However, as vegetation conditions become dry, some adults will move north on a very small scale toward winter breeding areas in North-West Africa.

CHAD

Population numbers will decline as vegetation becomes dry and scattered adults will move toward winter breeding areas of North-West Africa.

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

No significant developments are likely and no invasions are expected.

NORTH-WEST AFRICA

MOROCCO

There may be a small increase in numbers of scattered adults moving north from summer breeding areas in the Sahel into areas that have received recent rainfall south of the Atlas. However, any infestations will be on a small scale.

ALGERIA

There may be an increase in numbers of scattered adults moving north out of summer breeding areas in the Sahel into the Hoggar mountains and other areas in central Algeria.

TUNISIA and LIBYA

No significant developments are likely and no invasions are expected.

EASTERN AFRICA

SUDAN

As vegetation dries, adult populations will begin moving out of summer breeding areas towards winter breeding areas of the Red Sea coast. As a result, numbers of scattered adults are likely to increase on the Red Sea coast from populations moving east from Northern Kordofan and Central regions, while those in Northern Darfur may move westwards. However, any migration to winter breeding sites is likely to be on a small scale.

ETHIOPIA

Numbers of scattered adults may increase on the Red Sea coast and in northern areas as a result of small scale movement to winter breeding areas.

SOMALIA

If the unconfirmed reports of swarms in the north are indeed Desert Locusts, then the swarms will move south into central and southern Somalia late in the forecast period and start to lay.

DJIBOUTI, KENYA, UGANDA, and TANZANIA

No significant developments are likely and no invasions are expected.

NEAR EAST

KINGDOM OF SAUDI ARABIA

Scattered adults are likely to be present along the southern Tihama. Small scale breeding will commence there if enough rain falls.

YEMEN ARAB REPUBLIC

Small scale breeding should continue along the Tihama with resulting populations fledging by the end of the forecast period.

YEMEN PDR

Scattered adults are likely to be present on the south-western coastal plain. Small scale breeding will commence there if enough rain falls.

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

A few small swarms may form as a result of earlier breeding. However, further laying is unlikely and adult numbers should decline with the commencement of small scale movement west toward Baluchistan.

INDIA

A few small swarms may form as a result of earlier breeding. However, further laying is unlikely and adult numbers should decline with the commencement of small scale movement west toward Makran and other areas of Baluchistan.

IRAN

Adults may move into Baluchistan of Iran from the east during the forecast period.

AFGANISTAN

No significant developments are likely and no invasions are expected.

2 October 1989



Desert Locust Summary No. Crique Pélerin : Résumé No.

133

