

FAO DESERT LOCUST BULLETIN No. 144

GENERAL SITUATION DURING AUGUST 1990 FORECAST UNTIL MID OCTOBER 1990

Three small laying swarms were seen in the Indo-Pakistan summer breeding area in late July and by early August numerous hopper bands were reported in the Tharparkar desert of Pakistan. Although control operations were undertaken in Tharparkar, it is likely that some breeding went undetected in this and adjoining areas of India. These populations could form swarms and lay from Tharparkar to Barmer during the forecast period following widespread heavy rains which occurred in early August. Elsewhere, small scale breeding occurred further north in the Indo-Pakistan summer breeding during August.

Scattered adults and hoppers were present in southern Mauritania, central Mali, and small scale breeding is likely to have occurred in some areas of Adrar des Iforas of Mali, Tamesna of Mali and Niger, Air of Niger, in the western, central, and eastern regions of Sudan, and the southern Tihama of Saudi Arabia and Yemen during August. Breeding will continue in these areas and toward the end of the forecast period, some adults may start to move toward winter/spring breeding areas of North-West Africa, the Red Sea coastal plains, eastern Arabia, and Baluchistan. However, numbers are likely to be small and scattered.

Some populations of reddish and yellowish adults were reported in Mauritania during August which may be a result of undetected small scale high density breeding that occurred in late spring or early summer.



WEATHER AND ECOLOGICAL CONDITIONS

During August, the ITCZ oscillated around 20°N in West Africa and 16-18°N in East Africa. As a result, light to moderate rains were reported in most areas of the Sahel with a few showers further north during the first two decades of the month. However, very few reports of rain were received during the last decade.

In Mauritania, ARTEMIS satellite imagery indicated that light to moderate rain may have fallen in southern areas during the first decade of August becoming widespread during the second and third decades to include the south-east, south, and south-west, west, and as far north as Tiris Zemmour. Nouakchott received 55 mm during the second decade, Nema 18 mm, Atar 16 mm, Akjoujt 12 mm, and in Tiris-Zemmour, Bir Moghrein received 49 mm in one day. During the third decade, METEOSAT imagery indicated thunderstorm activity in the south.

In Mali and Niger, ARTEMIS imagery suggested that light to moderate rains may have occurred during August in southern Adrar des Iforas, Gourma, southern Tamesna, and southern Air. During the first decade in Mali, Gao received 55 mm, and Tessalit and Aguelhoc reported traces; Agadez received 24 mm during the first decade and 13 mm during the second, and Tahoua reported 55 mm during the first decade. During the third decade of August, METEOSAT imagery indicated traces of rain in Timetrine and the Bracknell model suggested light rainfall in Tamesna of Niger. Moderate to heavy rainfall was reported in south-west Mali and Niger during the first two decades of the month. Annual vegetation was reported to be drying out in northern areas of Mali by mid-August; whereas, conditions were favourable south of approximately 16°N and in some areas of Air.

ARTEMIS imagery suggested light to moderate rains may have occurred during August from Kanem to Biltine and further south in Chad. Mao received 50 mm during the first decade; Abeche received 23 mm and 16 mm, and Biltine 11 mm and 20 mm during the first two decades respectively. METEOSAT imagery and the Bracknell model indicated light rain in Ouaddai during the last decade of the month. Ecological conditions were reported to be favourable in a wide area from 14-16°N and in some areas of the north.

In Sudan, heavy rain fell during mid July in Darfur, resulting in favourable ecological conditions in early August. ARTEMIS imagery suggested that rain may have fallen during August over a wide area of western, central, and eastern regions reaching as far north as El Fasher, El Obeid, Kosti, and Kassala. By late August, rains may have occurred in Northern and Eastern regions as indicated by METEOSAT imagery and the Bracknell model. In Ethiopia, Asmara received 23 mm during the first half of August and moderate rains fell in the eastern Highlands; Dire Dawa reported 22 mm.

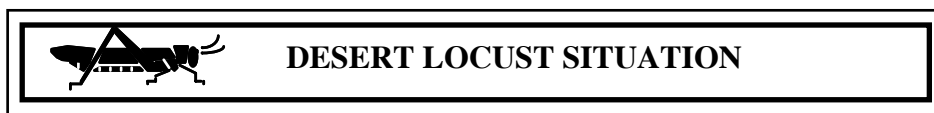
ARTEMIS and METEOSAT imagery and the Bracknell model indicated that light rain may have fallen on the southern Tihama of Saudi Arabia from Qunfidah to Jizan extending to the Tihama of Yemen throughout the month. METEOSAT indicated possible rain in Wadi Hadhramaut and Mahra in late August. Oman reported heavy rain in Dhahira at Samayal, Izki, Buraimi, Menah on the 9-10th, and Nizwa and Menah on 14th.

Widespread moderate to heavy rainfall occurred from 3-8 August in the Indo-Pakistan summer breeding area from Tharparkar desert to Barmer and Jodhpur. Shergarh (Jodhpur) received 85 mm and Ramgarh (Jaisalmer) 141 mm in 4 days. Standing water was present in many areas. As a result, vegetation conditions were extremely favourable in these areas. Light rain fell in most other areas of Rajasthan during the month and ecological conditions were favourable for breeding.



AREA TREATED IN AUGUST 1990

Iran (May-June)	36,010 ha
Pakistan (1-15 August)	4,600 ha



WEST AFRICA

MAURITANIA

During the last decade of July, isolated immature adults, some reddish in colour, were reported in Hodh El Gharbi at SoueGUIYA (1642N/0912W) and Ziret Bagui (1658N/0902W) on 26-29 July. Locusts were also reported north-west of Ould Yenje (1535N/1142W).

During the first half of August, scattered mature adults, some yellow in colour, were reported at numerous locations near Nema in Hodh El Charki, near Aioun El Atrouss in Hodh El Gharbi, and near Kiffa in Assaba. Copulating adults were seen at two locations north-west of Aioun El Atrouss on the 12th and fourth instar hoppers were reported at one location to the south.

MALI

During the last decade of July, scattered adults were reported in the Tilemsi Valley in Oued Tassaoualt (1926N/0031E), near Aguelhok in Oued Ratai (1923N/0052E), and in the Gourma region at N'Daki (1522N/0057W), Tin Adiatafane (1540N/0210W), and Bambara Maounde (1551N/0247W). An isolated adult was also seen near Nioro de Sahel at Diandioume (1528N/0922W) on the 28th.

During the second decade of August, scattered immature and mature adults, at a density of 5-6 per ha, and hoppers were reported at several locations in Gourma south of Gossi and in the Lac region.

NIGER

A late report was received indicating that scattered mature locusts were seen in several locations of western, central, and eastern Air during the second half of July. On the 23rd, adults at a density of 25 per ha were reported laying north-east of Arlit in Oued Aouror (1930N/0750E) on 80 ha.

During the first decade of August, scattered adults at a maximum density of 30 per ha were reported in Tamesna north-west of In-Abangharit at Aghlal Neklan (1843N/0537E) within 100 ha. A few adults were also seen south-west of In-Abangharit.

CHAD

No Desert Locusts were found during surveys in BET north-west of Faya on 5 and 10 August, in Ouaddai east of Abeche on the 13th, in Kanem near Mao on 13-14th, and in the Mongo area up to the 14th. Additional surveys did not detect locusts from 13-16°N up to the 28th.

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

NORTH-WEST AFRICA

No locust information had been received from countries in the region up to 31 August.

EASTERN AFRICA

SUDAN

No locusts were found during surveys in Northern Kordofan and Northern Darfur up to 25 July.

During the first half of August, scattered adults were found during ground surveys in Darfur and Kordofan. No further details are available.

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

No Desert Locusts were reported up to 15 August.

NEAR EAST

OMAN

No locusts were found in Batinah, Sharqiya, and Dhahira regions during surveys undertaken from mid-July up to 31 August.

KUWAIT

A late report was received indicating that no Desert Locusts were reported from mid-May to the end of June.

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

SOUTH-WEST ASIA

PAKISTAN

During the second half of July, three swarms were reported laying in the Tharparkar desert at Bisha (2446N/7025E) and Walika Tar (2448N/7027E) on the 20th and at Saila (2532N/7029E) on the 24th. The swarms varied in size from 2-16 sq. km. Solitary adults were seen in Lasbela and Tharparkar, Nara, and Cholistan deserts with a maximum density of 1,875 per sq. km. at Masit Wari (2733N/6948E) in Nara desert.

During 1-3 August, hatching occurred and numerous bands were seen in scattered patches of Tharparkar desert at Charyar (2538N/7025E), Dobhar (2545N/7035E), Walikar Tar (2448N/7027E), and Hajam Jo Tar (2448N/7041E) and in Khipro desert at Khusrau (2602N/6956E). Control operations were undertaken in all areas up to 16 August. Solitary first to third instar hoppers, at a maximum density of 15 per bush, were reported from 3 locations in Nara and 4 locations in Tharparkar deserts. Infested areas were 1-2 sq. km. in size. Solitary adults, at a maximum density of 4,000 per sq. km., were reported in Tharparkar and Nara deserts and in Lasbela area during the first half of August.

INDIA

During the second half of July, scattered adults were reported from 70 locations of Rajasthan, primarily in Bikaner district but also in Sri Ganganagar, Churu, Jodhpur, Barmer, Jaisalmer, and Nagaur districts with a maximum density of 6,000 per sq. km. at Dharhok (2732N/7304E) of Bikaner district on the 17th. Solitary first to third instar hoppers, at a maximum density of 5 per bush, were seen in Bikaner and Ganganagar districts.

During the first half of August, scattered adults were reported from 15 locations from the same districts (except Barmer) with a maximum density of 450 per sq. km. at Barani (2629N/7316E) of Jodhpur district on the 3rd. Low density hoppers were reported from 11 locations in Bikaner and Sri Ganganagar districts.

IRAN

A late report was received indicating that 21,010 ha were treated in the Chahbahar area and 15,000 ha in the Iranshahr area up to 5 June against hopper groups and bands.

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

NEW ASSISTANCE REQUESTED

PAKISTAN has requested the following to strengthen their locust programme:

1. Radios (with crystal frequencies 11850, 7550, 11610, 5044)

20 Pye SSB-150 F base radios with A.C. power unit
20 Pye SSB-150 M mobile radios with D.C. power unit

2. Radio spare parts (list available from FAO/ECLO)

3. Vehicles (technical specifications available from FAO/ECLO)

30 Toyota Hi-Lux 4WD double cab pick-ups or equivalent
10 Toyota Landcruiser 4WD single cab pick-ups or equivalent
4 Hino FF173K 7 ton cargo trucks or equivalent

4. Sprayers

20 ENS sprayers with 100 l tanks

NEW ASSISTANCE PLEDGED

No information regarding assistance against Desert Locusts had been received up to 31 August.

**ANNOUNCEMENTS**

The 31st session of the Desert Locust Control Committee (DLCC) will be held at FAO Headquarters in Rome on 24-28 September 1990.

 FORECAST UNTIL MID OCTOBER 1990
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WEST AFRICA**MAURITANIA**

Scattered adults will persist and breed in Inchiri, southern Adrar, Trarza, Tagant, and the two Hodhs. A few isolated adults may occur in Tiris-Zemmour where recent rains have fallen.

MALI

Scattered adults will persist and breed in the Adrar des Iforas and Tilemsi Valley. Scattered adults are almost certainly present and breeding in Tamesna. Adult numbers are likely to decrease toward the end of the forecast period in the Gourma area as adults move further north.

NIGER

Scattered adults will persist and breed in the Air and Tamesna during the forecast period.

CHAD

Scattered adults may be present and breed in some areas of BET, Kanem, Batha, Biltine, and Ouaddai.

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

No significant developments are likely and no invasions are expected.

NORTH-WEST AFRICA**MOROCCO**

A few scattered adults may reach south-eastern areas of the country toward the end of the forecast period.

ALGERIA

A few scattered adults may reach southern and central areas of the country toward the end of the forecast period.

TUNISIA and LIBYA

No significant developments are likely and no invasions are expected.

EASTERN AFRICA**SUDAN**

Scattered adults are likely to be present and breeding on a small scale in areas of Northern Darfur, Northern Kordofan, White Nile, Northern, and Kassala provinces. Scattered adults are likely to occur toward the end of the forecast period on the Red Sea coast as populations begin to move in from summer breeding areas.

ETHIOPIA

A few scattered adults may be present in Eritrea and the Red Sea coast and breed where recent rain has fallen.

SOMALIA

Scattered adults may be present on the northern coast and breed in areas that have received recent rain.

DJIBOUTI

Scattered adults may be present in coastal areas and breed in areas that have received recent rain.

KENYA, TANZANIA, and UGANDA

No significant developments are likely and no invasions are expected.

NEAR EAST

KINGDOM OF SAUDI ARABIA

Scattered adults are likely to be present on the southern Tihama from Qunfidah to Jizan where they may breed toward the end of the forecast period.

YEMEN

Scattered adults are likely to be present on the coast where they may breed toward the end of the forecast period. Scattered adults may also be present and breed in areas where recent rain has fallen on the coast west and east of Aden, near Shabawh, and in Wadi Hadhramaut.

BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, 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 and lay during the forecast period in Tharparkar desert which received heavy rainfall in early August. Scattered hoppers and adults with small scale breeding are likely to occur in Khipro, Nara, and Cholistan deserts.

INDIA

A few small swarms may form and lay during the forecast period in Barmer district as a result of undetected breeding following heavy rains in early August. Scattered hoppers and adults with small scale breeding are likely to occur in areas of green vegetation in Jodhpur, Jaisalmer, Bikaner, Nagaur, Churu, and Ganganagar districts.

IRAN and AFGHANISTAN

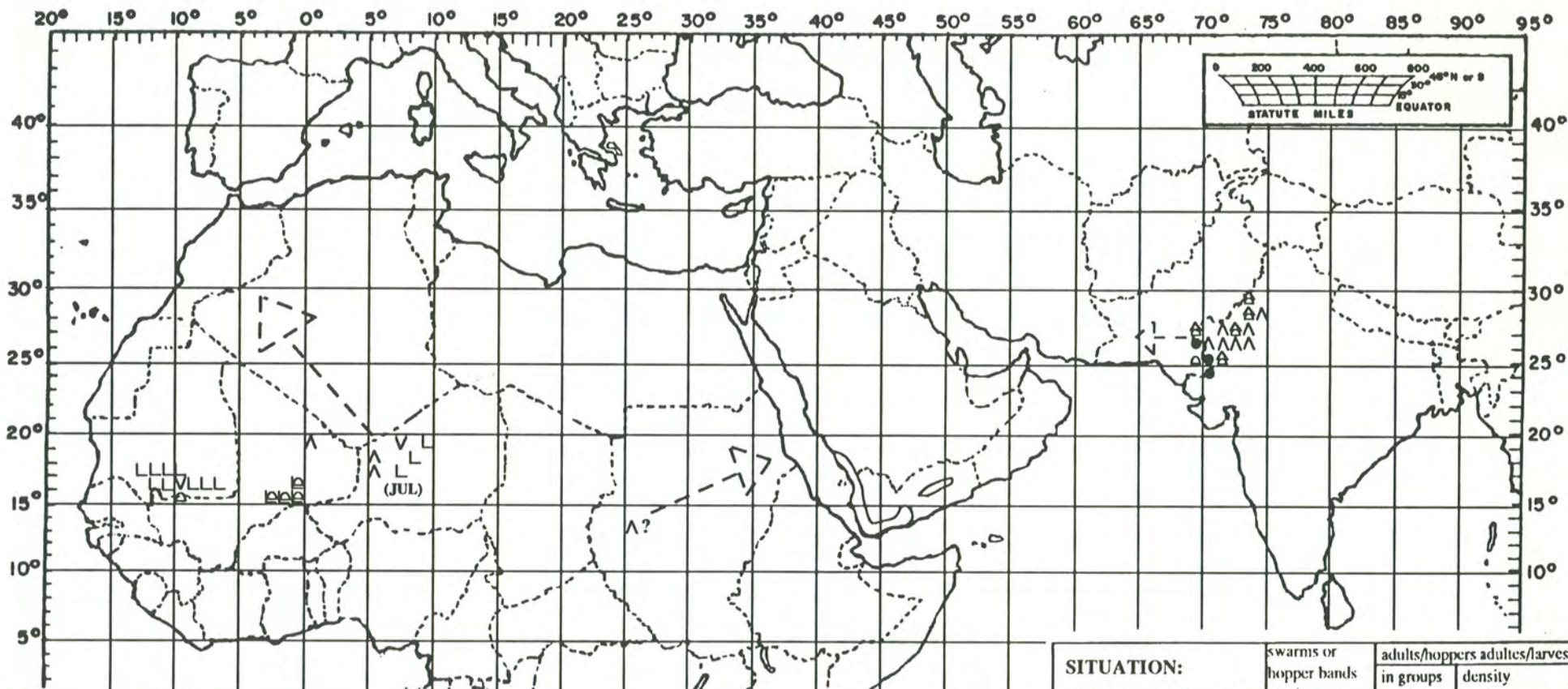
No significant developments are likely and no invasions are expected.

3 September 1990



Desert Locust: summary Criquet Pèlerin: situation résumée

No. 144



FORECAST TO: PREVISION AU: 15.10.90	LIKELY / PROBABLE	POSSIBLE POSSIBLE
current undetected breeding / reproduction en cours non détectées		
major swarm(s) / essaim(s) importantant(s)		
minor swarm(s) / essaim(s) limité(s)		
non swarm / aîlés non essaimant		

SITUATION:
AUGUST 1990

	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers in groups en groupes	density low/unknown densité faible/inconnue
immature adults aîlés immatures	■	□	▭
mature or partly mature adults aîlés matures ou partiellement matures	▲	▴	L
adults, maturity unknown aîlés, maturité inconnue	▲	△	∧
egg laying or eggs pontes ou œufs	▼	▽	∨
hoppers larves	●	○	◐
hoppers & adults (combined symbol example) larves & adultes (exemple de symbole combiné)	◼	◻	◻