



FAO



EMERGENCY CENTRE FOR LOCUST OPERATIONS

DESERT LOCUST BULLETIN No. 194



GENERAL SITUATION DURING OCTOBER 1994 FORECAST UNTIL MID-DECEMBER 1994

The Desert Locust situation continued to improve during October. However there are still some areas of concern in the Sahel of West Africa and Sudan. Breeding is in progress in central Mauritania where hoppers were reported forming small groups and a few swarms were seen laying in the west and north. More worrisome is that a few isolated small swarms have been seen in the summer breeding areas of Niger and Sudan as well as hoppers in Niger and Chad. This suggests that undetected breeding has occurred in parts of Tamesna of Niger, in a relatively confined area of northern Chad and in Northern Kordofan of Sudan. All of these areas received exceptional rains this summer. The extent of such breeding is not known in Niger or Sudan as some areas are inaccessible. However, additional groups of adults and perhaps a few small swarms could appear in these areas during the forecast period. Those in Niger will probably persist or move slightly to the north. In Chad, groups of adults are expected to move towards the Tibesti area. Locusts in central Sudan will most likely move east towards the winter/spring breeding areas of the Red Sea coast. The situation requires regular monitoring. Surveys should commence in the winter/spring breeding areas in the Red Sea area and in northern Mauritania.

Small scale ground control operations were carried out during October in Mauritania and Chad against groups of hoppers. A total of 668 ha were treated in Mauritania and 47 ha in Chad.

By mid October, the seasonal rains ceased in the summer breeding areas in the Sahel of West Africa and Sudan. There was no indication that rains had started in the winter/spring breeding areas of the Red Sea. However light rain did fall in northern Mauritania during the month.

In South-West Asia only scattered adults were present and numbers are expected to decline as adults move west towards the Baluchistan coast of Pakistan.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, telex, e-mail, FAO pouch and airmail by the Emergency Centre for Locust Operations, AGP Division, FAO, 00100 Rome, Italy.

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WEATHER AND ECOLOGICAL CONDITIONS DURING OCTOBER 1994

Based on field reports, METEOSAT and ARTEMIS satellite imagery, and Météo-France synoptic and rain data. Rainfall terms: light = less than 20 mm of rain; moderate = 20 - 50 mm; heavy = more than 50 mm.

During October the ITCZ continued its seasonal movement southward. Throughout the month it fluctuated between 13-18°N over West Africa however it reached as far as 22°N over Mauritania on 7 October. Even though the position of the ITCZ is bit further north than usual for this time of year, it appears that the summer rains have come to an end in most locust summer breeding areas of the Sahel. However cold clouds were present over south-eastern Mauritania and adjacent areas of Mali from Kiffa and Tichit to Tombouctou during the first decade of the month. Light to moderate rains were reported on 7-10 October from Kiffa to Nema. In three days, Nema received a total of 68 mm which is more than four times the long term average for the month. During the remainder of the month cold clouds remained well south of the summer breeding areas. No significant rains were reported except for some scattered showers in south-western Mauritania on the 22nd. Nouakchott reported light rainfall and 28 mm fell at Boutilimit.

Green vegetation was reported in central Mauritania whereas conditions in the south-east were starting to become unfavourable. However such conditions may improve as a result of the rains in Nema. Further north, breeding conditions are expected to improve near Zouerate and Bir Moghrein as a result of unusual and above average rains in late September (86 and 25 mm respectively) and light rains in October. Conditions were also improving in western Mauritania. In Mali, vegetation was reported to be drying out in the Adrar des Iforas and in eastern Chad. However green vegetation continued to persist in the northern Tamesna of Niger, in Chad near Fada (as a result of unusually heavy rains during the summer) and in the northern areas of Northern Kordofan and parts of Northern, Khartoum and White Nile provinces in Sudan.

In North-West Africa, unusual and above normal rains occurred in southern Algeria on 13-18 October. Tamanrasset reported 33 mm and Djanet 25 mm. The long term average for October for both these stations is 1 mm and the annual average is 42 mm and 26 mm respectively. Djanet received another 9 mm of rain on the 20th. As a result conditions may improve in and around these areas. The regular occurrence of eastward moving seasonal depressions over the Mediterranean that bring rains to North-West Africa during the winter had started by mid October.

In the winter breeding areas along the Red Sea, conditions are still for the most part dry as seasonal rains have not yet started on the coastal plains. However in Eritrea some wadis were reported flowing north of Massawa and conditions were improving.

In South-West Asia, no rainfall was reported during the first half of October. Consequently, conditions are becoming dry and unsuitable for breeding.



AREA TREATED IN OCTOBER 1994

Chad	47 ha
Mauritania	668 ha



WEST AFRICA

MAURITANIA

Ground survey teams could find no trace of the unconfirmed swarms reported in late September (Bulletin No. 193) and instead saw scattered adults copulating and laying in the same area. During the third decade of September, scattered immature and mature adults were reported from Kiffa (1627N/1124W) to Moudjeria (1753N/1220W) extending about 100 km north-west into eastern Trarza. A few late instar hoppers and fledglings were present north-west of Timbedra (1615N/0810W) and a few immature adults were seen about 50 km north-east of Nema (1637N/0715W).

During the two decades of October, adults continued to mature in parts of the summer breeding areas. Most of these infestations were concentrated between Kiffa and Tamchekket (1715N/1040W), Moudjeria and Tidjikja (1833N/1126W) and north-west of Moudjeria. Some adults were reported to be copulating in areas of green vegetation. Elsewhere isolated adults were present north of Aioun El Atrouss, near Timbedra and north-west of Nema.

By mid October reports indicated that some mature adults had moved north, west and south-west from the above areas and laid. New hatchlings were seen north-east of Boutilimit in the Aouker area (1743N/1422W); some of these were forming groups and small bands. Third to fifth instar hoppers and immature adults were reported in an area of previously undetected breeding near Lac Rkiz (1652N/1507W). Mature adults were seen north-west of Akjoujt (1945N/1423W). On 21 October, control operations were carried out against a 400 ha copulating swarm north-west of Tidjikja where very small first to third instar hopper bands were seen the previous day. Further north, there was also an unconfirmed report of a laying swarm and hopper north near Oujeft (2002N/1303W).

Elsewhere in the summer breeding area, several hopper bands ranging from 500 sq. metres to 6 ha in size and consisting of second to fifth instars were treated in an area of Hodh El Gharbi previously unsurveyed about 50 km north of Aioun at Bouzriba (1708N/0933W). Scattered hoppers and adults were also reported east of Oualata (1717N/0701W).

MALI

A late report stated that a few isolated adults were seen in areas of green vegetation near Tinkar (1926N/0021W) and Aguelhok (1928N/0052E) during the last decade of August.

During the first decade of September, unconfirmed infestations were reported west of Aguelhok at Tessoualt (1925N/0040E) as well as south of Tessalit near Irharrhar (1952N/0057E) and Izarzai where copulating adults were seen.

During the second decade, nomads reported seeing hopper groups in the W. Tarlit area (ca. 1935N/0045E) between Aguelhok and the Tilemsi Valley.

NIGER

One mature swarm, about 4 sq. km in size, was reported flying towards the south-west about 20 km south of Arlit on 1 October. Third to fifth instar hoppers at densities up to 500 per ha were seen between WadiSabir (1725N/0604E) and In-Abangharit (1754N/0603E) on 15-16 October. A low density swarm was also seen copulating on 6 ha north-east of In-Abangharit. There was also an unconfirmed report of infestations in other parts of Tamesna and Air however the extent of these infestations is not known.

CHAD

During the third decade of September, immature and mature adults were seen within 850 ha south-west of Mao (1407N/1520E) on 24 September and within 200 ha south of Faya-Largeau (1758N/1910E) on the 27th. Densities were estimated to be 6-10 adults per ha near Mao and 20-30 adults per sq. m near Faya. Some adults were seen copulating and laying eggs near Faya.

During the first decade of October, similar infestations were reported 7 km south of Faya on the 7th and 8th and at three locations north of Lake Chad near Rig Rig (1417N/1419E). By mid October, the first reports of small hopper groups mixed with maturing solitary adults were received from the Fada (1713N/2137E) area. Infestations consisted of small patches of third to fifth instar hoppers at densities of 50-250 per sq. metre at four locations within areas up to 2 ha. Ground control operations were carried out on a total of 47 ha on 13-20 October. There were also unconfirmed reports of locusts in the Zouar (2030N/1625E) region and of hoppers and new adults at three locations north-east of Fada. Scattered immature adults were seen from Arada (1501N/2039E) to Fada on 21-24 October. No locusts were seen during surveys in the Ouaddai, Biltine and Salal areas.

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

NORTH-WEST AFRICA

MOROCCO

No locust activity was reported during September.

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

EASTERN AFRICA

SUDAN

On 15 October a very small swarm of about 50 ha with a density of 10-15 adults per sq. metre and mixed with fourth and fifth instar hoppers in dense patches was seen at Wadi Muqaddam (1618N/3145) in Khartoum province. On the 22nd, an immature swarm was seen on 100 ha further south in Northern Kordofan province at Zureiga (1409N/3106E). The extent of similar infestations is unclear.

ERITREA

No locusts were reported during surveys undertaken south of Asmara in the second half of September.

A very low number of solitary adults were seen at Shelshela (1553N/3918E) on 7 October and in parts of the central Abudabas plain (1601N/3911E) and Agbanazof plain (1559N/3912E) in late October.

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

NEAR EAST

EGYPT

Scattered mature adults were seen during surveys on 24-28 September along the south-eastern coastal plains from Halaib (2213N/3645E) to Marsa Alam (2504N/3453E) and in several wadis to the west of the Red Sea Hills from Wadi Mor (2210N/3150E) to Wadi Allaqi (2305N/3250E).

SAUDI ARABIA

A late report indicated that no locusts were present during September.

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

SOUTH-WEST ASIA

PAKISTAN

During the second half of September, low densities of solitary adults were scattered at 76 locations of Lasbela, Tharparkar, Nara and Cholistan. Most of the infestations were in Tharparkar. A maximum density of 1,500 adults per sq. km was reported in Bahawalpur district of Cholistan at Nawakot (2820N/7150E) on 27 September.

During the first half of October, infestations decreased in the above areas. A total of 51 locations reported solitary adults with a maximum density of 1,200 adults per sq. km at Kheersar (2748N/7057E) in Cholistan on 2 October.

INDIA

During the second half of September, the number of locust infestations and densities declined in Rajasthan. Infestations of scattered adults were reported in Jaisalmer (11 locations), Bikaner (2), Nagpur (1) and Jodhpur (1) districts. A maximum density of 1,250 adults per sq. km was reported in Jaisalmer district at Darri (2630N/7022E) on 29 September. One group of 2nd to 5th instar hoppers were also seen in one area of 100 sq. m at Locrja (2748N/7022E) in Jaisalmer district.

During the first half of October, infestations and densities declined further in Rajasthan. Scattered solitary adults were reported from two locations in Jaisalmer district and one location in Bikaner at densities of 50-450 adults per sq. km. The maximum density was at Lunar (2636N/7014E) of Jaisalmer on 13 October.

IRAN

No locusts were reported during August and September.

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



WEST AFRICA

MAURITANIA

Current infestations in the summer breeding areas will decline and no further breeding is expected to occur. Low numbers of adults and perhaps a few groups are expected to appear in the north in the Akjoujt, Atar and Zourate areas where they will lay in areas where early winter rains occur.

SENEGAL

A few isolated or scattered adults may appear in the Senegal River basin early in the forecast period. However no significant developments are expected.

MALI

Due to the exceptional rainfall this summer, breeding may still occur in those areas of Adrar des Iforas where conditions remain favourable. However, breeding is expected to be on a relatively small scale and no significant gregarious infestations are expected to develop.

NIGER

As a result of unusually good rains this year, conditions remain favourable for breeding in parts of central and northern Tamesna. There is also a low risk that breeding has occurred in many of these areas which may have produced some adult groups and small swarms. Any mature adults are expected to move short distances and breed in any areas that remain favourable. Current hopper infestations are expected to concentrate and form small groups as vegetation starts to dry out during the forecast period. The situation requires careful monitoring.

CHAD

With the onset of dry conditions current infestations will concentrate in the remaining areas of green vegetation in the north. As a result, new adults are expected to form small groups near Fada and probably move towards Tibesti. Further breeding is unlikely in the Fada area. Infestations will decline in the central and Lake regions. By the end of the forecast period only small isolated infestations are likely to remain in the Tibesti area and perhaps near Fada.

**BURKINA FASO, CAMEROON, CAPE VERDE, GAMBIA, GUINEA BISSAU and GUINEA CON-
AKRY**

No significant developments are likely.

NORTH-WEST AFRICA

ALGERIA

Isolated adults may be present in the extreme south where they are expected to persist during the forecast period.

MOROCCO, TUNISIA and LIBYA

No significant developments are likely.

EASTERN AFRICA

SUDAN

The extent of infestations in Northern Kordofan and north-west of Khartoum remains uncertain. There is the possibility that additional swarms will form on a small scale. These are expected to move east towards the Red Sea winter breeding area. During the forecast period scattered adults and perhaps a few small swarms are likely to appear in southern coastal areas and lay with the onset of the rains.

ERITREA

Scattered adults are likely to appear in the traditional winter breeding areas along the Red Sea coast and lay with the onset of the rains. However, infestations are expected to be on a small scale and consist of solitary adults.

SOMALIA

Scattered adults may be present along the northern coastal plains and may lay by the end of the forecast.

DJIBOUTI, ETHIOPIA, KENYA, TANZANIA and UGANDA

No significant developments are likely.

NEAR EAST

SAUDI ARABIA

Scattered adults are likely to appear in the traditional winter breeding areas along the southern Tihama and lay with the onset of the rains. However, infestations are expected to be on a small scale and consist of solitary adults.

YEMEN

Scattered adults are likely to appear in the traditional winter breeding areas along the northern Tihama and lay with the onset of the rains. However, infestations are expected to be on a small scale and consist of solitary adults. A few isolated adults may be present along the coastal plains of Aden.

EGYPT

There is a very low possibility of a few adults appearing on the southern coastal plains near the Sudanese border and lay if rainfall occurs during the forecast period.

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

No significant developments are likely during the forecast period.

SOUTH-WEST ASIA

PAKISTAN

As conditions become unfavourable, current infestations will decline in the summer breeding areas. Adults that resulted from summer breeding along the Indo-Pakistan border will move west towards the coastal plains of Baluchistan (Mekran). However this movement is expected to consist of only a low number of solitary adults. Any locusts that reach the Mekran will persist there during the forecast period.

INDIA

Current infestations will decline as conditions become unfavourable in Rajasthan. No further breeding is expected and only low numbers of solitary adults will persist during the forecast period.

AFGHANISTAN and IRAN

No significant developments are likely during the forecast period.



The following meetings are scheduled:

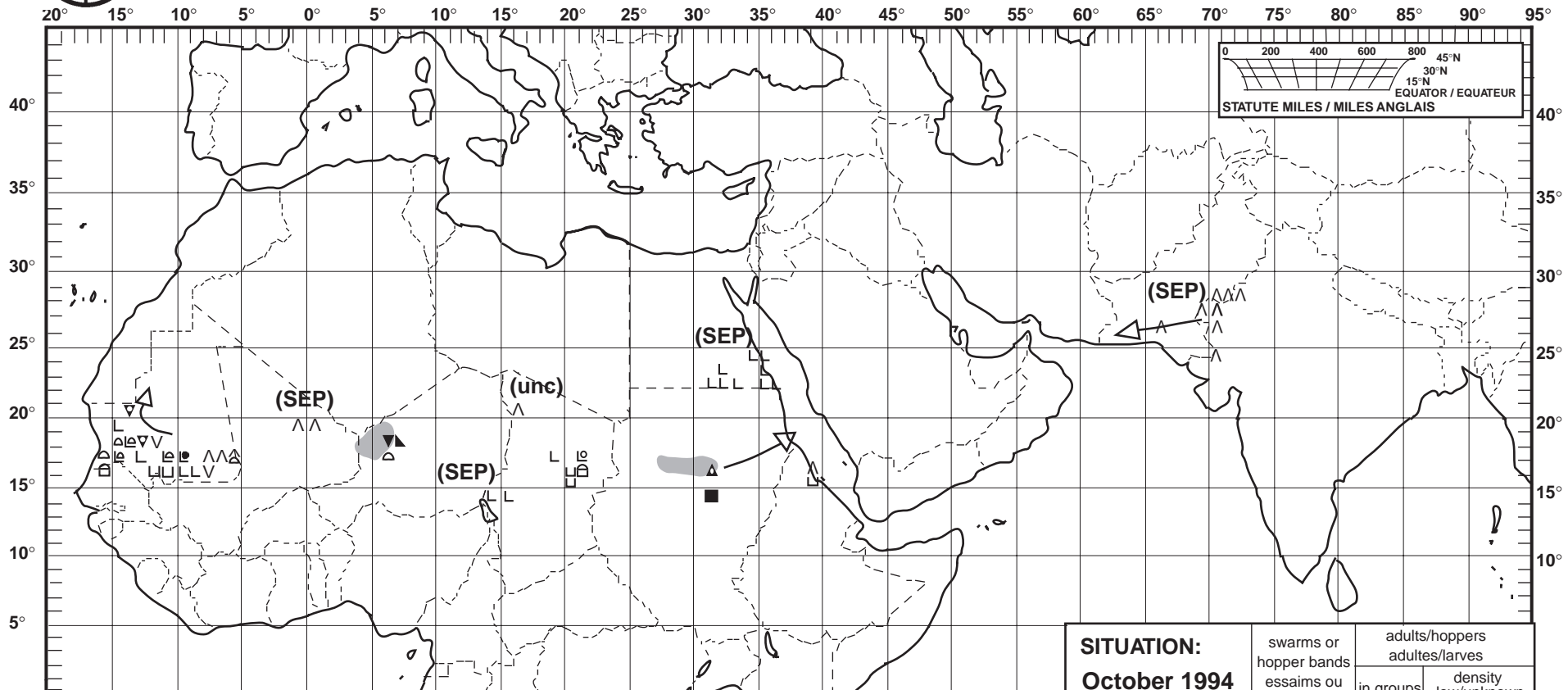
9 December 1994	EMPRES Donor meeting, FAO Rome
13-15 December 1994	Near East Executive Committee, Cairo
18-20 December 1994	20th Session FAO Near East Commission for Controlling Desert Locust, Cairo
16-22 January 1995	33rd Session Desert Locust Control Committee (DLCC), FAO Rome
23-25 January 1995	South-West Asia Executive Committee, FAO Rome

2 November 1994



Desert Locust: summary Criquet pèlerin: situation résumée

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FORECAST TO: PREVISION AU: 15.12.94	LIKELY PROBABLE	POSSIBLE POSSIBLE
current undetected breeding reproduction en cours et non détectée		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: October 1994 octobre 1994	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers adultes/larves	
		in groups en groupes	density low/unknown densité faible/inconnue
immature adults adultes immatures			
mature or partly mature adults adultes matures ou partiellement matures			
adults, maturity unknown adultes, maturité inconnue			
egg laying or eggs pontes ou œufs			
hoppers larves			
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)			