FAO

EMERGENCY CENTRE FOR LOCUST OPERATIONS

DESERT LOCUST BULLETIN No. 195

GENERAL SITUATION DURING NOVEMBER 1994
FORECAST UNTIL MID-JANUARY 1995

There has been a resurgence of Desert Locust activity in Africa. During November a number of swarms formed and moved from northern Mali and probably northern Niger to southern Algeria, and from southern towards northern Mauritania. Some adults moved further north into south-western Morocco. In Sudan, swarms were forming and starting to move towards the Red Sea coast where conditions are favourable for breeding. Control operations are in progress in most areas.

As a result of late summer rains, undetected breeding has occurred in northern Mali and Niger, and in some parts of Mauritania and Sudan. Due to a lack of detailed information primarily from Mali, Niger and Algeria, it is extremely difficult to assess the scale of this breeding, the amount of resulting swarms and their subsequent movement towards winter breeding areas.

In Mauritania the effectiveness of current control operations is limited by the difficulties of finding and treating all of the hopper infestations. If conditions remain favourable for breeding, a potentially dangerous situation could develop in which locust numbers rapidly increase.

Swarm formation is expected to continue during the forecast period in the above areas. Adults and swarms can move towards North-West Africa at times when depressions occur over the Mediterranean and the Sahara mainly early in the forecast period. A few of these may reach the southern side of the Atlas Mountains. In northern Mauritania breeding will continue extending perhaps to south-western Morocco. Breeding is likely to occur along the coastal plains on both sides of the Red Sea. Breeding is also expected in northern Somalia where heavy rains are thought to have fallen recently.

Elsewhere a small movement of solitary adults has occurred in western Pakistan which may have extended into south-eastern Iran and the north-eastern Arabian Peninsula. Low numbers of adults are expected to persist in these areas during the forecast period.

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 & ECOLOGICAL CONDITIONS DURING NOVEMBER 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 the first two decades of November, some seasonal depressions were present over the northern Mediterranean. However, these did not cause significant rainfall to occur over the winter breeding areas of North-West Africa. The ITCZ continued its southward movement, from 15-16°N early in the month to below 10°N by the end. Very little cold cloud activity was visible over the Desert Locust breeding areas during the entire month, except for Somalia. However, at this the time of the year, rainfall occurs mainly due to medium level clouds which are not always detected as cold clouds. No significant rain was reported during November over most of these areas.

A high pressure system persisted off the western Moroccan coast and over the western Mediterranean during the first two decades causing north-easterly winds over Mauritania. Easterly winds were present over Mali and Niger, whereas northerlies occurred over Chad most of the month. A depression over southern Algeria on the 12th-15th may have favoured any movement of adults from northern Mali and northern Niger. During the last decade, the high pressure system present over the Atlantic and the western Mediteranean slowly drifted eastwards being replaced by a depression. As a result of this and of small depressions present over the Mouydir region of Algeria, winds changed to south-easterlies in Mauritania, and northerlies over the Tamesna of Mali and Niger. These may have brought some additional adults towards the winter breeding areas of Mauritania and Algeria.

Favourable conditions may persist a bit longer than normal in western Mauritania due to widespread rains in late October. Temperatures throughout Mauritania were above normal during most of November. Sprouting vegetation and standing water were seen during an aerial survey in Atar and Zouerate regions during the first decade, whereas vegetation was drying out in the two Hodhs. Patches of green vegetation were persisting in northern Mali where some wadis were reported flooded during October. Similar conditions are expected to be present in northern Niger. In northern Chad, vegetation was drying out.

No significant rains were reported during November in the winter breeding areas of the Red Sea coast of Sudan. There was only localized cold cloud over Wadi Oko during the first decade.

Substantial cold clouds were present over the Hargeissa and the Bari regions of northern Somalia during the first two decades. Widespread moderate rains fell on the coast and in adjacent areas of the interior on the 7th-10th. Similarly, heavy rainfal occurred in Djibouti at the end of each of these decades. A total of 97 and 157 mm respectively was reported. As a result, breeding conditions are expected to have improved in several areas. To a lesser extent, ecological conditions are likely to be favourable in places in the Railway region of Ethiopia where Dire Dawa received 44 mm on 21st-22nd. In Eritrea some green vegetation persisted along the coastal plains as a result of significant rains in early October.

Some cold cloud activity was visible to the north of Jeddah and in coastal areas near Mukalla, Yemen, by the end of the first decade, and again over Jeddah on 22-23 November. However, little rain apparently fell.

No rains were reported in South-West Asia.

AREA TREATED IN NOVEMBER 1994

Algeria	no details	
Mauritania	3,748 ha	(21-30 October)
	27,995 ha	(1-20 November)
Sudan	8,385 ha	(27 October - 6 November)
India	5 ha	(27-28 October)

DESERT LOCUST SITUATION

WEST AFRICA

MAURITANIA

During the last decade of October, patches and bands of all instar hoppers, sometimes mixed with scattered or small groups of fleglings and immature adults, were reported at numerous places primarily north of Aioun el Atrous, north and north-west of Moudjeria (1753N/122W), south-east of Magta Lajar (1731W/1302W), near Boutilimit (1733N/1441W), near Mederdra (1656N/1540W), east of Akjoujt and south and south-east of Atar. Many of these hopper infestations could not be treated as they were small and dispersed over a widespred area. Some small groups of laying adults, at densities up to 15 per sq.m., were reported on about 4 ha east of Akjoujt during the same period. There was an unconfirmed report of a swarm near Boutilimit. A total of 3,748 ha of hoppers was treated by ground teams.

During the fisrt decade of November, increasing numbers of hopper patches, bands and groups of adults continued to be reported north of Aioun, north-west of Tidjikja, north-west of Moudjeria, and north-west of Boutilimit. A 50 ha swarm was seen in Rag Tamarat (1831N/1242W). First to fourth instar hopper bands mixed with scattered immature and mature adults, some of them forming groups, were reported south of Atar where laying was in progress. There were also two unconfirmed reports of swarms at 2004N/1241W and 1934N/1237W during the first half of the month. A total of 4,480 ha of hoppers and 1,400 ha of young adults were treated up to 10 November.

During the second decade, the situation continued to worsen with more signs of adult migration towards the north and the west. About 10 small swarms were reported north of Moudjeria, north of Magta Lajar, north-east of Boutilimit and south of Atar. Three high flying swarms were reported moving west near Boumdeid (1743N/1104E) on the 30th. Hopper infestations continued to be reported and some of them treated in previously infested areas. A total of 8,681 ha were treated by ground and 13,434 ha by air.

The first reports of isolated adults in the Zouerate region were received during the second decade.

MALI

A late report stated that one mature swarm was seen laying in Tilemsi Valley at Izarzai (1930N/0035E) within an area about 10 km long during the first decade of October. Scattered mature adults were reported in the same region between Keur Terrech (1936N/0024E) and Tiracherin (1940N/0042E). During the second decade, high numbers of immature and mature adults, some of them laying, were present north-east of Tessalit at Borrach (2043N/0110E) and at several locations along the Tilemsi Valley between the Markouba (1850-1856N/0038E) and the Bolrech (2007N/0035E) areas. First and second instar hoppers were seen at Tin Echerin (1940N/0042E) mixed with adults.

During the last decade of November, there were reports by nomads and local administrators of several maturing swarms in Tamesna from Tin Essako (1826N/0230E) to the Nigerian border, and from Alguelhoc (1928N/0052E) and north of Kidal (1825N/0124E) to the Algerian border. Hopper bands, some of them mixed with adults, were also present west of Kidal and in the Tilemsi Valley. However, the situation is not clear due to a lack of detailed information.

CHAD

On 25 October - 2 November, patches of third to fifth instar hoppers, at densities up to 150 per sq.m., persisted in several areas of drying dense vegetation in the Fada region. As hoppers started to fledge and disperse, survey teams found scattered immature and mature adults. However, nomads reported one swarm near Batadjale (1704N/2140E).

On 4-17 November, scattered immature adults and a few groups were reported from several locations west, south and south-east of Fada, sometimes associated with scattered to small groups of remaining hoppers.

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

NORTH-WEST AFRICA

MOROCCO

A few isolated solitarious adults were reported in the Dakhla Province near Oum Dreiga (2359N/1310W and 2358N/1313W) on 21 November and further north along the coast at Boujdour (2615N/1420W) and Foum Alouad (2710N/1336W) on the 22nd.

ALGERIA

Several low density swarms were reported south of Tamanrasset in mid-November. Survey and control operations were in progress. No details were available.

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

EASTERN AFRICA

SUDAN

No locusts were found during surveys in Northern Kordofan from north-west of El Obeid to Wadi Milk and Umm Badr (1414N/2758E), east and north-east of El Obeid to White Nile and Khartoum Provinces respectively, and in Northern Darfur north of El Fasher to Mellit (1408N/2535E) and Wadi Saiyah (1420N/2545E) at the end of October.

However, as a result of widespread favourable conditions further north, undetected breeding occurrred in Northern Kordofan, Khartoum and Northern Provinces by late October and early November. Reports indicated late instar hoppers, fleglings and immature adults in Khartoum State at Fattasha (1529N/3211E) on 27 October, first instar hoppers north-west of Ed Damer at Wadi Abu Dom (1815N/3220E) and El Ferah in Wadi Bitia (1735N/3245E) on 5 November, late instar hoppers and immature adults in Northern Kordofan at Abu Uruq (1554N/3037E) on the 6th. There were also unconfirmed reports of 2nd instar hopper bands in Northern Kordofan at Umm Gerrin (1323N/3031E) on 31 October, and of a swarm near the Chadian border at Kebkabiya (1338N/2405E).

Control operations were carried out when possible, treating a total of 6,385 ha from 27 October to 6 November.

ERITREA

No locusts were reported during surveys near Keren (1547N/3828E) on 1-10 November. Isolated immature and mature adults were seen along the coast near Abudabas (1557N/3904E) and Mersa Gulbub (1624N/3910E) on the 15th-18th. The adults reported near Abudabas were associated with isolated hoppers and fleglings. No locusts were found on the coastal plains south of Abudabas to Wadi Emberemi (1543N/3925E).

SOMALIA

Two isolated adults were seen east Las Surud (1106N/4738E) during a survey carried out along the northern coastal plains up to Bossaso (1117N/4911E) on 4-11 November. No locusts were reported between Las Surud and Erigavo (1838N/4722E).

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

NEAR EAST

EGYPT

Scattered mature adults were reported along the south-eastern coastal plains between Halaib (2213N/3645E) and Shalatein (2310M/3537E) and at a few places in the subcoastal hills between Marsa Alam (2504N/3453E) and the Nile on 10 October.

SAUDI ARABIA

No locust activity was reported during October.

KUWAIT

No locust activity was reported during October.

UNITED ARAB EMIRATES

Isolated adults, at a density of 15-20 per ha, were reported at 2508N/5621E in Fujayrah on 6 November.

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

SOUTH-WEST ASIA

PAKISTAN

(correction from Bulletin no. 194: Kheesar coordinates are 2821N/7146E)

During the second forthnight of October, scattered adults were reported from 31 locations of Lasbela, Tharparkar, Khipro, Nara and Cholistan deserts, with a maximum density of 1,200 per sq. km at Masitwari (2736N/6956E) in Nara on the 23rd.

During the first half of November, scattered adults were reported from Khuzdar (2747N/6636E), suggesting that seasonal movement was in progress in the interior of Baluchistan. No locust reports were received from the Makran coastal areas.

INDIA

During the second half of October, small mixed infestations of Desert and Migratory Locusts, probably adults, were treated over a total of 5 ha at Kerala (2602N/7015E) and Satto (2615N/7028E) in Barmer district on the 27th-28th. Scattered adults were also reported from 8 locations of Jaisalmer district, 5 of Bikaner and 5 of Barmer, with a maximum density of 6,250 per sq. km at Satto on the 25th.

No locust activity was reported during the first haf of November.

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

FORECAST UNTIL MID-JANUARY 1995

WEST AFRICA

MAURITANIA

Breeding will continue in northern regions from Akjoujt to Zouerate and perhaps Bir Mogrein in areas of recent rains. As a result hopper bands and some small swarms are expected to form during the period.

MALI

Low numbers and perhaps a few groups of adults are expected to persist in parts of the Adrar des Iforas; however, no further breeding is likely to occur.

NIGER

Low numbers and perhaps a few groups of adults are expected to persist in parts of northern Tamesna; however, no further breeding is likely to occur.

CHAD

Low numbers of adults are expected to persist in parts of BET primarily in the Fada and Zouar areas; however, no further breeding is expected to occur.

SENEGAL

A few isolated adults may be present in the extreme north; however no significant developments are likely.

BURKINA FASO, CAMEROON, CAPE VERDE, GAMBIA, GUINEA BISSAU and GUINEA CONAKRY

No significant developments are likely.

NORTH-WEST AFRICA

ALGERIA

The situation remains unclear. Additional infestations may appear from the south mostly early in the forecast period on warm southerly winds associated with Saharan and Mediterranean depressions. These may breed in areas of recent rains in the southern and central regions. The scale of such breeding is difficult to assess due to a lack of information.

MOROCCO

Additional adults and a few small swarms may appear in the extreme south and some of these may move further north towards the southern side of the Atlas Mountains. These movements are expected to occur mostly early in the forecast period on warm southerly winds associated with depressions over North-West Africa. Breeding may occur in areas of favourable conditions.

TUNISIA and LIBYA

No significant developments are likely.

EASTERN AFRICA

SUDAN

Adults and perhaps a few small swarms are likely to appear in coastal areas extending from the Egyptian border to Eritrea. These will lay in areas where rains occur most probably in Wadi Diib, Tokar Delta and along the coastal plains of Suakin and perhaps Aitarba. By the end of the forecast period a few small swarms may form.

ERITREA

Numbers of scattered adults are expected to increase in the traditional winter breeding areas along the Red Sea coast. Breeding will occur during the forecast period in areas of recent rains along the coastal plains.

SOMALIA

Scattered adults are likely to be present and breeding along the northern coastal plains in areas of recent rains. The scale of such breeding is difficult to assess due to a lack of information.

DJIBOUTI

Scattered adults are likely to be present and breeding along the coastal plains in areas of recent rains. The scale of such breeding is difficult to assess due to a lack of information.

ETHIOPIA

A few isolated adults may be present in the Railway area.

KENYA, TANZANIA and UGANDA

No significant developments are likely.

NEAR EAST

SAUDI ARABIA

Scattered adults are likely to be present in the traditional winter breeding areas along the Tihama from Jeddah to Jizan. These will breed, if not already, during the forecast period in areas of recent rains. The scale of such breeding is difficult to assess due to a lack of detailed information.

YEMEN

Scattered adults are likely to be present in the traditional winter breeding areas along the Tihama. These are expected to breed during the forecast period in areas of recent rains. The scale of such breeding is difficult to assess due to a lack of detailed information. A few isolated adults may be present and breeding along the coastal plains east of Aden.

EGYPT

Adult numbers are expected to increase along the south-esatern coast as a result of movement from the summer breeding areas and from current breeding.

OMAN

A few adults may be present on the Batinah coastal plains and persist during the period.

UAE

There is a low possibility of additional infestations of scattered adults on the Fujayrah coast which would persist during the period.

BAHRAIN, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON , QATAR, SYRIA and TURKEY

No significant developments are likely during the forecast period.

SOUTH-WEST ASIA

PAKISTAN

Scattered adults may be present in some coastal areas of the Mekran of Baluchistan.

IRAN

A few adults may appear on the south-eastern coastal plains from the east.

INDIA

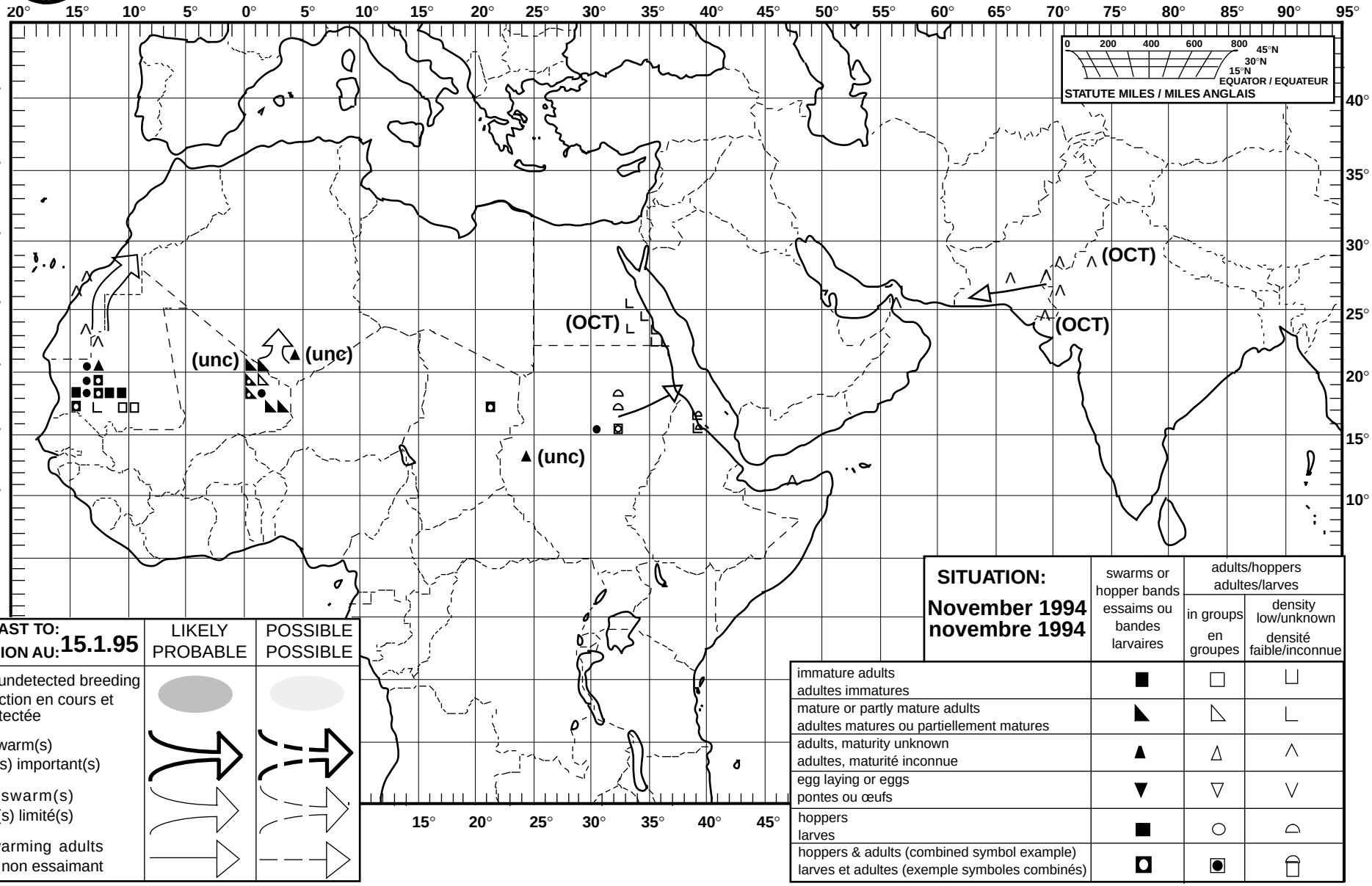
A few isolated adults may be present and will persist in parts of Rajasthan.

AFGHANISTAN

No significant developments are likely during the forecast period.

1 December 1994

Desert Locust: summary No. 195
Criquet pèlerin: situation résumée



FORECAST TO: PREVISION AU: 15.1.95	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: November 1994 novembre 1994	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers adultes/larves: in groups en groupes	adults/hoppers adultes/larves: 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)	◘	◙	⊕