

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 242
(7 Dec 1998)



General Situation during November 1998 Forecast until mid-January 1999

The Desert Locust situation remained calm in most countries during November. Control operations were required in Sudan as a result of late breeding in the interior which produced hopper bands. Low numbers of adults began to appear along both sides of the Red Sea where breeding has already occurred and will continue. There is a low risk that a few small swarms will form in the interior of Sudan and move to the Red Sea coastal plains. Regular surveying and reporting are recommended along both sides of the Red Sea. Adults and remnants of a swarm appeared in southern Algeria from northern Mali. Numbers decreased along the Indo-Pakistan border.

Central Region. In the interior of northern Sudan, control operations were carried out against hopper bands which formed as a result of late summer breeding. A few small swarms are likely to form and move to the Red Sea coastal plains and eventually lay eggs. Some swarms may move across the sea to the coast of Saudi Arabia where solitary breeding is in progress and control operations were undertaken against the first generation of solitary hoppers.

Undetected breeding occurred during October in a few places on the Red Sea coastal plains of Eritrea and Yemen, and by November groups of hoppers were reported in the former and solitary hoppers were present in the latter. Locust numbers will increase along both sides of the Red Sea as breeding continues during the winter. Isolated adults were present in north-eastern Somalia and persisted in south-eastern Egypt.

Western Region. Several small swarms are thought to have formed in northern Mali and moved on warm southerly winds into southern Algeria where one fragment was treated while the rest probably dispersed. Some may also have moved into Mauritania where a few isolated adults were already present. Isolated adults were also reported in Morocco south of the Atlas Mountains. Locust numbers may increase further in Algeria as there is a possibility that a few more small swarms may appear and lay eggs.

Eastern Region. Summer breeding has come to an end along the Indo-Pakistan border where only a few isolated adults remain in Rajasthan, India. No significant developments are expected.

The FAO Desert Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, e-mail, FAO pouch and airmail by the Locusts and Other Migratory Pests Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the Internet.

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Weather & Ecological Conditions in November 1998

Very little rainfall was reported during November except for a few isolated showers along parts of the Red Sea coastal plains. Nevertheless, breeding conditions continue to be favourable in many places from October rains. Dry conditions prevailed in other regions.

In **Eastern Africa**, isolated showers fell on the Eritrean coast during the first half of November. Cold clouds were present over the northern coast between Mersa Gulbub and Karora. Vegetation was becoming green in many areas along the coast. In northern Sudan, breeding conditions remained favourable in parts of the interior, primarily in Northern Kordofan, the Baiyuda Desert, and near Atbara and Shendi due to rains during the previous month. In Ethiopia, light rains fell sporadically in the railway area. In northern Somalia, green vegetation was reported in the north-east where light to moderate rains fell at mid month.

In the **Near East**, heavy but isolated rains fell at mid month on the Red Sea coastal plains near Jeddah. Vegetation was reported to be green in the Jizan area and in some places along the base of the coastal foothills to the north. In Yemen, favourable breeding conditions were reported in much of the Tihama as a result of heavy rains in October. Vegetation was drying up along the coastal plains east and west of Aden and light rain fell in Wadi Hadhramaut early in the month.

In **West Africa**, light to moderate rains fell in a few places of western Mauritania near Nouakchott and Atar early in the month. Vegetation was reported to be green in some places in the north but to be drying out in other spots in the centre of the country. Dry conditions prevailed elsewhere in the region.

In **North-West Africa**, isolated showers fell along the southern side of the Atlas Mountains in parts of Morocco and Algeria early in the month. In Morocco, dry conditions prevailed and temperatures remained low. In Algeria, green vegetation was reported in some wadis of the central and southern Sahara, mainly to the north-east and south-west of Tamanrassat. Strong

warm southerly and south-easterly winds associated with several Mediterranean depressions and a high pressure system over North-East Africa occurred over southern Algeria at times throughout the month.

In **South-West Asia**, although light showers fell in parts of Rajasthan, India early in the month, dry conditions generally prevailed along the Indo-Pakistan border as well as elsewhere in the region.



Area Treated

Algeria	30 ha	(25 November)
Saudi Arabia	160 ha	(November)
Sudan	1,523 ha	(4-22 November)



Desert Locust Situation and Forecast

(see also the summary on the first page)

WEST AFRICA

Mauritania

• SITUATION

During November, isolated adults were present between Akjoujt (1944N/1420W) and Tidjikja (1829N/1131W). Yellow adults mixed with solitary adults were seen near Tidjikja at mid month. This suggests that some adults may have arrived from gregarious breeding in northern Mali.

• FORECAST

Locusts may slightly increase in the north between Akjoujt and Bir Moghreïn where limited breeding could occur if rains fall. These may be supplemented by low numbers of adults arriving from northern Mali early in the forecast period.

Mali

• SITUATION

No reports received.

• FORECAST

Low to moderate numbers of locusts may persist in the Adrar des Iforas as a result of earlier breeding that led to limited swarm formation during November.

Niger

• SITUATION

No reports received.

• FORECAST

Low numbers of solitary adults are likely to persist in a few areas of Tamesna.

Chad

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Senegal

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Burkina Faso, Cape Verde, Gambia, Guinea Bissau, and Guinea Conakry

• FORECAST

No significant developments are likely.

NORTH-WEST AFRICA

Algeria

• SITUATION

There were numerous reports of solitary locust adults mixed with grasshoppers during the second and third dekads of November suggesting that a small scale northern movement occurred from the Sahel. The locusts were seen west of Tamanrassat near Silet (2239N/0435E) at densities of 50-100 adults per ha, and in several wadis in the Hoggar Mountains at densities of 10-15 adults per ha. Control operations treated 30 ha of adults at densities of 100-150 per tree north-west of Tamanrassat (2247N/0531E) on the 25th. This may have been part of a swarm fragment that was seen flying north-west over Tamanrassat on the 21st.

• FORECAST

Scattered adults will persist in some places of the central and southern Sahara. These may be supplemented by additional adults and perhaps a few small groups or swarms arriving from the northern Sahel during periods of warm southerly winds. Some adults could move further north towards the Atlas Mountains. Small scale breeding is expected in areas of green vegetation.

Morocco

• SITUATION

A single adult locust was reported on the southern side of the Atlas Mountains near Errachidia at Taltefraout (3146N/0505W) during the first dekad of November.

• FORECAST

Isolated adults may be present in a few places of the Adrar Souttouf in the extreme south-west and along the southern side of the Atlas Mountains.

Tunisia

• SITUATION

No locusts were reported during October.

• FORECAST

No significant developments are likely.

Libyan Arab Jamahiriya

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

EASTERN AFRICA

Sudan

• SITUATION

In the Northern Province, scattered solitary adults at densities of 20-50 adults per ha persisted in the Baiyuda Desert during November. Ground control operations treated 200 ha of first to third instar hopper bands along the eastern bank of the Atbara River near Ed Damer (1737N/3359E) as well as 28 ha of second to fourth instar bands near Shendi at El Matema (1651N/3313E).

In Northern Kordofan, about 2,000 ha were reported to be infested with high densities of gregarious hoppers of all stages and immature adults north of Hamrat El Wuz (1501N/3008E). Control operations were in progress and had treated 1,295 ha by the 19th.

• FORECAST

Small swarms are expected to form early in the forecast period in Northern Kordofan and Northern provinces. Some of these may remain in green areas, but the majority are expected to move east towards the Red Sea coast. On the coastal plains, scattered adults are likely to be already present and breeding. These will be supplemented by adult groups and swarms arriving from the interior throughout December. Small to moderate scale breeding will occur throughout the forecast period.

Eritrea

• SITUATION

During the first half of November, groups of second to fifth instar hoppers and mature adults were reported on 20 ha on the southern Red Sea coastal plains north-west of Assab (1330N/4242E). This suggests that undetected breeding occurred during October.



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• FORECAST

Small scale breeding will continue along the southern Red Sea coastal plains and is expected to extend to the northern plains where scattered adults may already be present.

Somalia

• SITUATION

Isolated mature adults were reported in the north-eastern highlands at Bocane (0824N/4756E) and Qarxis (0829N/4934E) during the last week of November.

• FORECAST

Low numbers of solitary adults are likely to persist in some places of the north-east and breed in areas of green vegetation.

Ethiopia

• SITUATION

No reports received.

• FORECAST

Isolated adults may be present and breeding on a small scale in areas of recent rainfall near Dire Dawa.

Djibouti

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Kenya, Tanzania and Uganda

• FORECAST

No significant developments are likely.

NEAR EAST

Saudi Arabia

• SITUATION

Solitary immature adults at densities of 50-200 were reported on the southern Red Sea coastal plains from four locations near Qunfidah (1915N/4110E) and 12 locations near Jizan (1656N/4233E) during the last decade of November. Control operations were undertaken against solitary second to fifth instar hoppers at densities of 5,000 per ha at three locations near Qunfidah. This suggests that undetected breeding occurred during October.

• FORECAST

Adults will mature and breed along the southern coastal plains of the Red Sea, leading to a further increase in numbers. Low numbers of adults may extend north along the coastal plains from Lith to Diba. There is a moderate risk of a few small groups or swarms arriving on the central or northern plains from Sudan which would eventually lay eggs and produce hopper bands.

Yemen

• SITUATION

A few isolated adults were seen on the northern Red Sea coastal plains near Midi (1618N/4217E) and Abs (1601N/4312E) during the first week of November. By the end of the month, more immature and mature solitary adults were found along the coastal plains between Bayt Al Faqih (1431N/4319E) and Bajil and from Wadi Mawr (1545N/4259E) to Midi. A fifth instar hopper and fledglings were seen near Al Qutay (1454N/4312E) on the 25th indicating that undetected breeding occurred during October. No locusts were seen during surveys along the coastal plains of the Gulf of Aden in mid November.

• FORECAST

Small scale breeding will occur and hoppers will be present along the Red Sea coastal plains, resulting in a gradual increase in locust numbers during the forecast period.

Egypt

• SITUATION

Isolated mature adults persisted on the south-eastern coastal plains and around Lake Nasser during November. Elsewhere, no locusts were reported.

• FORECAST

Locust numbers will gradually increase on the southern coastal plains of the Red Sea as adults and perhaps a few small swarmlets arrive from the summer breeding areas and start to breed. Isolated adults may persist in a few inland oases.

Kuwait

• SITUATION

No locusts were reported during October.

• FORECAST

No significant developments are likely.

Oman

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.



Announcements

UAE

- SITUATION

No reports received.

- FORECAST

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Qatar, Syria Arab Republic and Turkey

- FORECAST

No significant developments are likely.

SOUTH-WEST ASIA

Iran

- SITUATION

No locusts were seen during surveys on 19-26 November on the coastal plains east of Bushehr.

- FORECAST

No significant developments are likely.

Pakistan

- SITUATION

No locusts were reported during November.

- FORECAST

No significant developments are likely.

India

- SITUATION

During the second fortnight of October, isolated adults were present at two locations in Bikaner District, Rajasthan.

During November, isolated adults were reported from nine locations of Bikaner District during the first fortnight and at one location of Jodhpur District during the second fortnight.

- FORECAST

Numbers will continue to decline in Rajasthan and only a few isolated adults will persist.

Afghanistan

- FORECAST

No significant developments are likely.

Locust reporting. Affected countries are kindly reminded to make sure that locust situation reports are sent to FAO HQ by the 25th day of the month so the information can be included in the FAO bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

Desert Locust Control Committee: Date Change. The 35th session of the DLCC has been rescheduled for 24-28 May 1999.



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Glossary of terms

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

NON-GREGARIOUS ADULTS AND HOPPERS

ISOLATED (FEW)

- very few present and no mutual reaction occurring;
- 0 - 1 adult/400 m foot transect (or less than 25/ha).

SCATTERED (SOME, LOW NUMBERS)

- enough present for mutual reaction to be possible but no ground or basking groups seen;
- 1 - 20 adults/400 m foot transect (or 25 - 500/ha).

GROUP

- forming ground or basking groups;
- 20+ adults/400 m foot transect (or 500+/ha).

ADULT SWARM AND HOPPER BAND SIZES

VERY SMALL

- swarm: less than 1 km² • band: 1 - 25 m²

SMALL

- swarm: 1 - 10 km² • band: 25 - 2,500 m²

MEDIUM

- swarm: 10 - 100 km² • band: 2,500 m² - 10 ha

LARGE

- swarm: 100 - 500 km² • band: 10 - 50 ha

VERY LARGE

- swarm: 500+ km² • band: 50+ ha

RAINFALL

LIGHT

- 1 - 20 mm of rainfall.

MODERATE

- 21 - 50 mm of rainfall.

HEAVY

- more than 50 mm of rainfall.

OTHER REPORTING TERMS

BREEDING

- the process of reproduction from copulation to fledging.

SUMMER RAINS AND BREEDING

- July - September/October

WINTER RAINS AND BREEDING

- October - January/February

SPRING RAINS AND BREEDING

- February - June/July

DECLINE

- a period characterised by breeding failure and/or successful control leading to the dissociation of swarming populations and the onset of recessions; can be regional or major.

OUTBREAK

- a marked increase in locust numbers due to concentration, multiplication and gregarisation which, unless checked, can lead to the formation of hopper bands and swarms.

PLAGUE

- a period of one or more years of widespread and heavy infestations, the majority of which occur as bands or swarms. A major plague exists when two or more regions are affected simultaneously.

RECESSION

- period without widespread and heavy infestations by swarms.

REMISSION

- period of deep recession marked by the complete absence of gregarious populations.

UPSURGE

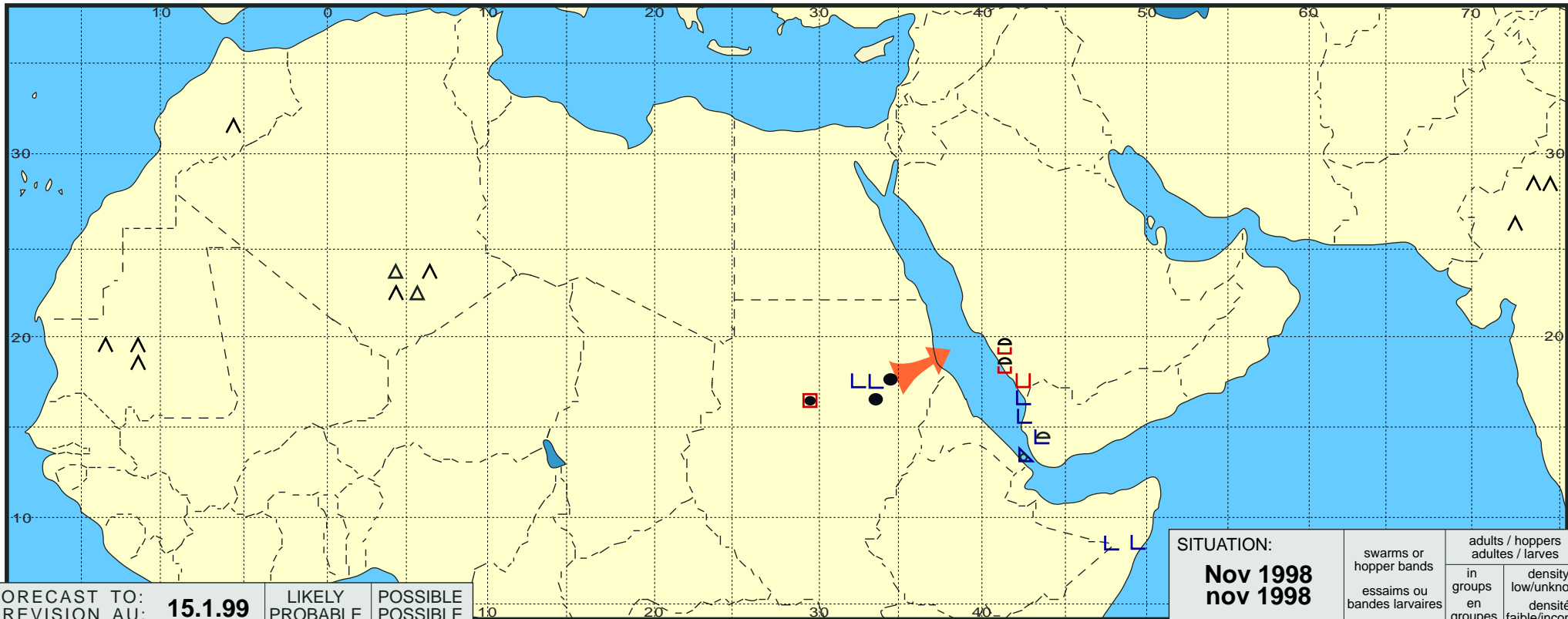
- a period following a recession marked initially by a very large increase in locust numbers and contemporaneous outbreaks followed by the production of two or more successive seasons of transient-to-gregarious breeding in complimentary seasonal breeding areas in the same or neighbouring Desert Locust regions.



Desert Locust Summary

Criquet pèlerin situation résumée

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FORECAST TO: PREVISION AU:	15.1.99	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favorables à la reproduction			
major swarm(s) essaim(s) important(s)			
minor swarm(s) essaim(s) limité(s)			
non swarming adults adultes non essaimant			

SITUATION: Nov 1998 nov 1998	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)			