FAO

LOCUST, OTHER MIGRATORY PESTS, & EMERGENCY OPERATIONS GROUP

DESERT LOCUST BULLETIN No. 168

GENERAL SITUATION DURING AUGUST 1992
FORECAST UNTIL MID OCTOBER 1992

The only reports of locusts received during August were of isolated adults in the summer breeding areas of Pakistan and India. These areas received exceptionally good rains during the month and breeding is almost certainly in progress and will continue during the forecast period.

No locust surveys were carried out in the Sahel of West Africa; however, scattered adults are almost certainly present and breeding in areas where recent rains have occurred, primarily southern Mauritania, southern Adrar des Iforas of Mali, Tamesna of Niger, eastern Chad, and western and central Sudan.

Unusually heavy rains fell on the Red Sea coast and interior areas of the Arabian Peninsula earlier this month. Although there have been no recent reports of locusts, it is possible that low numbers are present and will start to breed in some of these areas.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by telefax, telex, FAO pouch, or mail by the Locust, Other Migratory Pests, and Emergency Operations Group, AGP, FAO, 00100 Rome, Italy.
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WEATHER AND ECOLOGICAL CONDITIONS

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 August, the ITCZ remained between 19°N and 22°N over West Africa. Numerous small depressions were associated with the ITCZ and as a result, rainfall occurred sporadically throughout the month within the locust breeding areas of West Africa and Sudan. Cold cloud activity was more prevalent during the first and third decades rather than the second in Mauritania, Mali and Niger. In Chad and Sudan, however, the opposite was true. Rainfall returns during the month suggest that the rains are below normal in all locust breeding areas except for El Obeid (203 mm) and Khartoum (86 mm) in Sudan. Despite this, enough rain has fallen in most areas to allow breeding during the forecast period. The areas in which conditions are expected to be very favourable for breeding are in southern Mauritania from Aioun El Atrous to Oualâta, in the wadis of the southern Adrar des Iforas in Mali (mainly the Kidal area between the Tilemsi Valley and Tin Essako) and from southern Tamesna to Menaka, in the southern Tamesna and western Aïr of Niger (as far north as Iferouâne), in the eastern regions of Biltine, Ouaddaï and Ennedi (as far north as Fada) of Chad, and in Sudan between Kutum and El Fasher, near El Obeid and En Nahud, and in the Gash Delta north of Kassala. Conditions are expected to be improving in western Mauritania between Boutilimit and Tidjikja as a result of moderate rainfall during the last decade of the month.

During the second decade, cold clouds were present over the Red Sea coast of Ethiopia and Sudan, extending north to south-eastern Egypt; light rain was reported at Port Sudan. Similar cold clouds persisted over the coasts of Saudi Arabia and Yemen during the first two decades, extending as far north as Umm Lajj (25°N) on the Tihama. These clouds also extended well into the interior covering the southern Rub Al Khali (Empty Quarter) as far as 22N/53E. As a result, widespread moderate to heavy rainfall occurred in coastal and interior areas of Saudi Arabia and Yemen; for example, Najran received 46 mm on the 12th. Consequently, breeding conditions are expected to be favourable in most areas of the Tihama of Saudi Arabia and Yemen, the coastal plains west of Aden, and interior areas from Wadi Najran to Wadi Jawf, Sabatyn, Wadi Hadhramaut and the southern Rub Al Khali.

In South-West Asia, widespread moderate to heavy rains associated with the monsoon fell in desert areas of Pakistan and western India during the first week of August. For example, in the Tharparkar desert of Pakistan, Mirpur Khas received 151 mm, in Cholistan, Bahawalpur received 32 mm, and Karachi 255 mm; in Rajasthan of India, Jodhpur reported 74 mm, Shergarh 82 mm and Phalodi 81 mm during the first half of the month. As a result, breeding conditions are expected to be favourable over a considerable area extending from Tharparkar to Jodhpur.

AREA TREATED IN AUGUST 1992

No control operations were reported during August.

DESERT LOCUST SITUATION

See the last page of this Bulletin for a definition of terms used in reporting the current locust situation.

WEST AFRICA

MAURITANIA, MALI, NIGER

No locust surveys were undertaken during August.

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

NORTH-WEST AFRICA

MOROCCO

No locusts were reported in July.

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

EASTERN AFRICA

SUDAN

No locusts were found during surveys in the Central Region near Ed-Dueim, in the Eastern Region north of Kassala, and in the Northern Region near Shendi and Ed-Damer during the first week of August.

ETHIOPIA, DJIBOUTI, KENYA, TANZANIA, UGANDA

A late report stated that there was no locust activity during July.

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

NEAR EAST

YEMEN

A late report stated that no locusts were seen during June and July.

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

SOUTH-WEST ASIA

PAKISTAN

During the first half of August, there was a slight increase in the number of areas infested in Lasbela, Tharparkar, Nara, and Cholistan deserts where a total of 19 localities reported isolated adults with a maximum density of 400 per sq. km at Jogidas (2752N/7113E) on the 8th.

INDIA

A late report stated that isolated adults at a density of 225 per sq. km were present at two localities in Bikaner District and three locations in Jaisalmer District during the first half of July.

During the last half of July, isolated adults at a density of 150 per sq. km were present at Nawatalla (2707N/7139E) in Jaisalmer District on the 28th.

During the first half of August, isolated populations persisted in Jaisalmer District where 4 localities reported adults with a maximum density of 150 per sq. km at Rohidewala (2747N/7140E) on the 5th.

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

FORECAST UNTIL MID OCTOBER 1992

Forecasting terms used in this section to indicate the chances of a particular event happening are indicated below; every term is arranged within each category from most to least probable:

high probability	will, probably, almost certain, likely, expected
medium probability	may, might
low probability	possibly, perhaps, unlikely

WEST AFRICA

MAURITANIA

Scattered adults are likely to be present and breeding in the two Hodhs and additional adults may appear and start breeding in Tagant, Brakna and Trarza during the forecast period.

MALI

Isolated adults are likely to be present and breeding in some wadis near Kidal in the Adrar des Iforas and in the southern Tamesna.

NIGER

Scattered adults are likely to be present and breeding in Tamesna and the western Aïr and in the northern Aïr near Iferouâne.

CHAD

Isolated adults are likely to be present and breeding in the eastern regions of Biltine and Ouaddaï, and near Fada in BET.

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

No significant developments are likely.

NORTH-WEST AFRICA

ALGERIA, MOROCCO, TUNISIA and LIBYA

No significant developments are likely.

EASTERN AFRICA

SUDAN

Scattered adults are almost certainly present and breeding in areas of recent rains, mainly near El Obeid and En Nahud in Northern Kordofan, near El Fasher and Kutum in Northern Darfur, and near Kassala and the Gash Delta in the Eastern Region.

ETHIOPIA

The locust situation continues to remain unclear; however, in Eritrea isolated adults may be present and breeding in areas of recent rainfall in the Western Province and on the Red Sea coastal plains.

DJIBOUTI, KENYA, SOMALIA, TANZANIA and UGANDA

No significant developments are likely.

NEAR EAST

SAUDI ARABIA

Isolated adults may be present along the Tihama and on the eastern side of the Asir Mountains near Wadi Najran and start to breed in areas that received recent rains.

YEMEN

Isolated adults may be present along the Tihama and coastal plains west of Aden, and in interior areas of Wadi Jawf, Sabatyn, Wadi Hadhramaut, and perhaps the southern edge of the Rub Al Khali and start to breed in areas that received recent rains.

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

No significant developments are likely.

SOUTH-WEST ASIA

PAKISTAN

Low numbers of adults will persist during the forecast period in Cholistan, Nara and Tharparkar deserts and in Lasbela District where breeding is almost certainly in progress in areas of recent rainfall.

INDIA

Low numbers of adults will persist during the forecast period in Jaisalmer and adjacent districts where breeding is almost certainly in progress in areas of recent rainfall.

AFGHANISTAN and IRAN

No significant developments are likely.

1 September 1992

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

Non-gregarious adults

isolated	very few adults present and no mutual reaction occurring; 0 - 1 adult per 400 m foot transect (or less than 25 per ha). other terms: a few.
scattered	some adults present where mutual reaction could occur but no grouping; 1 - 20 adults per 400 m foot transect (or 25 - 500 per ha). other terms: some, low numbers.
group	showing aspects of gregarious behaviour and/or colouration; more than 20 adults per 400 m foot transect (or more than 500 per ha).

Non-gregarious hoppers

isolated	very few present, at low densities, no mutual reaction occurring; less than 10 at a survey site.
scattered	some present but no ground or basking groups; more than 10 at a survey site.
group	forming ground or basking groups.

Adult swarm and hopper band sizes

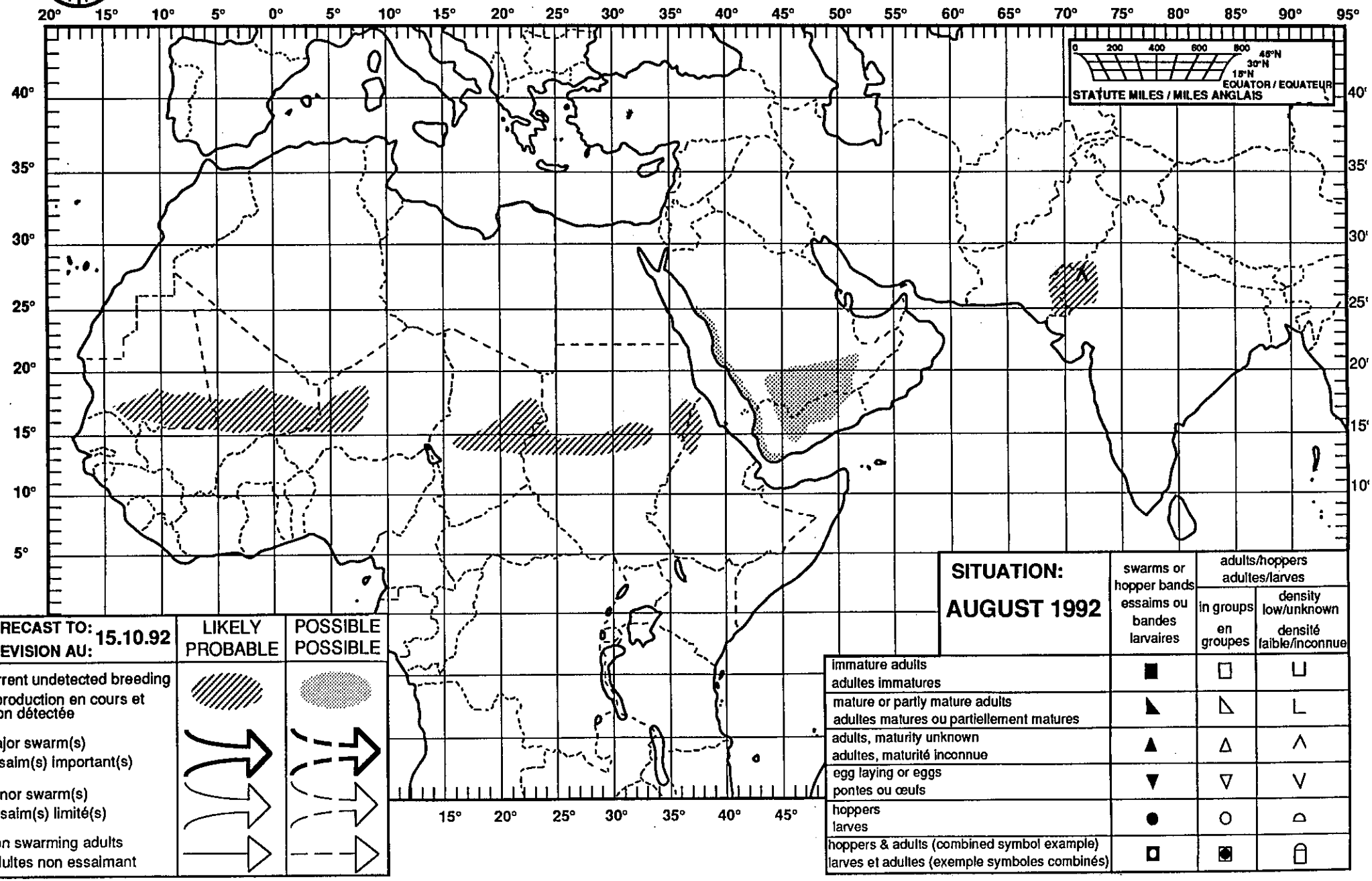
very small	swarm: less than 1 sq. km	band: 1 - 25 sq. m.
small	swarm: 1 - 10 sq. km	band: 25 - 2,500 sq. m.
medium	swarm: 10 - 100 sq. km	band: 2,500 sq. m - 10 ha
large	swarm: 100 - 500 sq. km	band: 10 - 50 ha
very large	swarm: more than 500 sq. km	band: more than 50 ha

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
outbreak	a marked increase in locust numbers due to concentration, multiplication and gregarisation.

Desert Locust: summary
Criquet pèlerin: situation résumée

No.168



FORECAST TO: 15.10.92 PREVISION AU: 15.10.92	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:

AUGUST 1992

	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	◣	◺	L
adults, maturity unknown adultes, maturité inconnue	▲	△	^
egg laying or eggs pontes ou œufs	▼	▽	V
hoppers larves	●	○	⌓
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)	◘	◙	⍾