



FAO



DESERT LOCUST BULLETIN No. 173



Populations of all stages continue to build up and become gregarious on the Red Sea coast of Africa and Arabia Peninsula although control operations tend to continue in most regions, and the current upsurge has many characteristics of previous upsurges which have led to plagues. Numbers of hopper bands and immature swarms severely increased on the Red Sea coast areas of Egypt, Sudan, Eritrea, Saudi Arabia and Yemen, as a result of earlier breeding and continuous highly favourable conditions in all these areas where light to heavy rain continued during the month, sometimes limiting the control operations. They also became more widespread with bands reported near Aden, and also unconfirmed reports of bands on the north-western coastal plains of Somalia.

Elsewhere, isolated hoppers and adults were reported from some northern and western parts of Mauritania, where green vegetation persisted. In December, scattered to small numbers of immature adults were still persisting in northern Tamesna of Niger. No significant breeding is expected in any of these places due to low seasonal temperatures.

No locusts were reported from north-west Africa; although a few adults may persist at some places of Central Sahara of Algeria, no significant breeding is expected due to low seasonal temperatures.

In south-west Asia, only scattered adults were reported in Rajasthan of India and the conditions may allow only small scale breeding at a few places of recent rain in Baluchistan of Pakistan and Iran.

However, the situation may change quite rapidly in Eastern Africa and Near East during this forecast period, and later in the other Regions if swarms leave the current infested zones to reach as far as India from populations built up in the Hadramaut, if any, and, during the summer, back across the Red Sea to central Sudan and perhaps Chad, Niger, Mali, Mauritania and southern Algeria.

Any preparation to monitor the situation in these countries is strongly recommended.

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 January, a depression was present on the eastern part of the Mediterranean and the northern regions of the Near East during the entire first decade, extending south to south-eastern Egypt and then to Sudan by Khartoum area on the 6th-7th. Meanwhile, a high pressure system was building up from the western part of the Mediterranean from the 6th onwards, extending to the entire Mediterranean and partly Near East where generally northerly winds resulted in the Arabia Peninsula, which were not favourable to locust migration from current infested zones. However, on the 26th, a frontal line reached the western part of this area from the north and commenced to affect the wind patterns.

As a result in northern regions of Africa, some light rain fell from northern Morocco to northern Libya and at times northern Egypt during the first decade, and started again from the 26th. In West Africa, although some cold cloud activity was visible over most Mauritania during the first decade and have produced widespread light rain on the 2nd-4th, conditions were reported as mostly dry and cold during the first half of the month; some green vegetation was found during the first fortnight only in northern Adrar and northern Tiris Zemmour near Bir Moghreïn which also received 5 mm on the 21st. In Niger, patches of green vegetation are likely to persist in some places of northern Tamesna.

Although no complete details were received, light to heavy rains continued to fall on both sides of the Red Sea during the month; for example, heavy rains were reported from Eritrea in infested areas north of Asmara during the first fortnight, and from northern Tihama of Yemen at Hodeidah where streets were flooded by the 25th. As a result of this and unusual earlier heavy rain, conditions remain highly favourable for breeding on the Red Sea coast in southern Egypt, Sudan in Suakin, Tokar and Aitarba areas and Eritrea, as well as on the Tihama of Saudi Arabia and Yemen. Even if winter rains were to stop, conditions will remain favourable for breeding at many places of these areas until at least the end of March. Similar conditions are probable on the western side of the coastal hills in Sudan and Eritrea, and also along the Ethiopian coast, Djibouti and northern coastal plains of Somalia, where rain have fallen during November and December. In addition to this, some localized cloud activity was seen during the second and third decades on the north-western coastal plains of Somalia and might have resulted in some rainfall.

Conditions may be favourable at places in Oman and the UAE where light to moderate rain occurred, primarily in Oman on the southern Batinah on the 14th and the Musandam Peninsula on the 15th.

Frontal lines and depressions were observed over Baluchistan of Iran and Pakistan on the 9th-10th, 17th and 23rd; however, conditions may be favourable only at some places as only a few light rain were reported from Chah Bahar on the 7th and from the interior and coastal areas of Makran of Pakistan during the first decade. In India, Bikaner reported 7 mm on the 15th but conditions are expected to remain dry.



AREA TREATED IN JANUARY 1993

Sudan	52,000 ha (update October-January)
Egypt	2,000 ha (up to 14 January)
Saudi Arabia	no details received
Yemen	20,000 ha (27 December-12 January)



WEST AFRICA

MAURITANIA

There were signs of seasonal earlier small scale migration and breeding, as suggested by isolated hoppers observed in Inchiri near Akjoujt on the 5th, and isolated adults seen at some places in Adrar and northern Trarza for example north of Benichab (1926N/1524W) on 25 December-16 January.

NIGER

During December, persisting small numbers of fledglings and primarily immature adults, up to 100 per ha, were observed at 7 locations in northern Tamesna north and west of In-Abangharit on the 23rd-25th. An unusual population of immature adults was also reported at a density of 10-50 per ha over 10,000 ha further south at Oued Sabil (1728N/0605E) on the 26th.

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

NORTH-WEST AFRICA

ALGERIA, MOROCCO and TUNISIA

No locusts were reported during December.

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

EASTERN AFRICA

SUDAN

During the second half of December, late instar hopper bands mixed with *Locusta* were reported and sprayed at Khor Baraka (1720N/3730E).

During January, the situation considerably aggravated as the total infested area was estimated to exceed 150,000 ha on the 24th January. Heavy infestations of 4th-5th instar hoppers and fledglings were observed in Suakin, Tokar Delta and Aitarba areas both in natural vegetation and millet on the 9th-13th; dense patches of 2nd instar hoppers also observed near Suakin suggested that breeding continued late, or that an early third generation may have started. High density immature swarms migrating from the south were reported and sprayed between Port Sudan and Suakin over 600 ha on the 12th, again in the same area, at Port Sudan and in Tokar Delta over a total of 3,800 ha on the 14th-15th, and in Aitarba area over a total of 300 ha on the 17th-18th.

In Wadi Diib/Okoko, the infestation was limited at a few locations, although breeding conditions were considered as favourable.

ETHIOPIA

During December, infestations of late instar hopper, covering a total area of 54,000 ha in Karora area (1750N/3820-30E) and Marsa Teklay (1735N/3850E), were reported on the 28th and there was an unconfirmed report of hoppers in Agbanazuf plain (1555N/3900E) on the 29th.

No update was received during January. However, control operations, primarily aerial, were limited by heavy rain and low level dense clouds.

DJIBOUTI

No locusts were reported although conditions were favourable. Surveys were due to commence in January on the northern coast.

SOMALIA

During December, there were unconfirmed reports from travellers of adults and hopper bands from several places between Berbera and Abdel Kader, where conditions were reported to be favourable.

KENYA, TANZANIA, UGANDA

No locusts were reported.

NEAR EAST**SAUDI ARABIA**

During January, first instar hoppers hatched in the Mowassim area close to the Yemen border where control operations started on the 13rd.

YEMEN

In late December, hoppers and adults were reported in the Masip area west of Mukalla (1432N/4908E) and by early January, bands of all instars were reported over an area of 50 sq. km in the same area, and another hopper infestation was reported east of Aden.

During January, numerous small (1-25 sq. m) low density 4th-5th instars hopper bands mixed with fledglings and groups of immature adults were reported and treated within 15,000 ha of green vegetation on northern Tihama between Abs (1601N/4312E) and Az-Zurah (1544N/4300E). Similar populations and groups of late instar hoppers and fledglings, and groups/low density swarms of pink adults (5 per sq. m.) were reported and sprayed south and west of Abs up to the 27th.

EGYPT

During January, hopper bands were reported on the Red Sea coast near the Sudanese border from 5 wadis between Halaïb and Wadi Diib, Gash Amir (2214N/3611E) and El Kwan (2226N/3616E) up to the 8th.

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

SOUTH-WEST ASIA**PAKISTAN**

No locusts were reported during the first half of January.

INDIA

During the second half of December, populations continued to decrease in Rajasthan with isolated adults at a density of 150 per sq. km reported at two locations of Jaisalmer district on the 17th.

No locusts were reported during the first half of January.

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

**WEST AFRICA****MAURITANIA**

Isolated to scattered adults will persist in Adrar and northern Trarza where small scale breeding may occur in areas of recent rains if temperatures warm up. Some fledglings will appear in Inchiri near Akjoujt.

MALI

Isolated adults are likely to be present and persist in Tamesna and Adrar des Iforas. However, the situation remains unclear.

NIGER

Small numbers of adults will persist in northern Tamesna and may breed on a small scale if rainfall occur and if temperatures warm up.

CHAD

Isolated adults are likely to be present and persist in northern Tibesti.

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

No significant developments are likely during the forecast period.

NORTH-WEST AFRICA**ALGERIA**

Isolated to scattered adults are likely to be present and persist in Central Sahara, where breeding is not likely to occur due to seasonal low temperatures.

MOROCCO, TUNISIA and LIBYA

No significant developments are likely during the forecast period.

EASTERN AFRICA**SUDAN**

Large numbers of fledglings will appear in infested areas of Suakin, Tokar Delta and Aitarba, where they will form swarms. These will mature and are likely to breed on a large scale locally; depending on the wind patterns, a strong possibility exists for them to also migrate north towards Egypt or east across the Red Sea towards the Saudi Arabia Peninsula, where conditions will allow them to mature and breed on a large scale.

ETHIOPIA

Immature swarms will continue to appear during the forecast period on the coastal areas of Eritrea, and possibly as far as the western side of the adjacent coastal hills. These will mature and breed on a large scale locally, and will also continue to migrate towards north to areas south of Port Sudan, where conditions will allow them to mature and breed on a large scale. Situation should be clarified on the central and southern coastal areas of Ethiopia where significant populations are likely to be present if conditions are favourable.

DJIBOUTI

Numbers of adults could be present on the northern coastal plains and breeding in areas of recent rains.

SOMALIA

As suggested by the situation reported in Yemen near Aden, hopper bands resulting from local breeding may also be present in areas of green vegetation of the north-western coastal plains. Any attempt should be tried to clarify the situation from information or sightings by travellers.

KENYA, TANZANIA and UGANDA

No significant developments are likely during the forecast period.

NEAR EAST**SAUDI ARABIA**

On the southern Tihama, numbers of bands will continue to appear despite of immediate control operations and large scale breeding will continue as swarms can migrate at any time into the Tihama where highly favourable conditions will allow them to mature and breed. Swarms formed on the Tihama are likely to start moving north and east towards the interior of the Arabia Peninsula where they may find suitable conditions for maturing and start laying during the forecast period.

YEMEN

Immature swarms will continue to appear on the Tihama and on the coastal plains east of Aden; although these will find favourable conditions for local breeding, they may also migrate towards north to any place along the Tihama, and east towards the interior of the Arabia Peninsula where they may find suitable conditions for maturing and start laying during the forecast period.

EGYPT

Fledglings will appear on the southern Red Sea coast where they will form groups of adults or small swarms. These can mature and breed locally, and/or migrate towards northern Egypt where they may find suitable conditions for maturing and start laying during the forecast period.

OMAN

Scattered adults may be present and breeding on the Batinah. Moreover, there is a possibility of some incoming swarms during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended on the Batinah and Sharqiyah areas.

UAE

Scattered adults may be present and breeding in the Fujayrah area. Moreover, there is a possibility of some incoming swarms during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended in the Fujayrah.

QATAR and BAHRAIN

There is a possibility of some incoming swarms during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended.

JORDAN

Some incoming swarms may reach the southern regions during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended in these areas.

IRAQ

Some incoming swarms may reach the southern regions during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended in these areas.

KUWAIT

There is a possibility of some incoming swarms during the second half of the forecast period. Surveys and any attempt to monitor the situation are strongly recommended.

ISRAEL, LEBANON, SYRIA and TURKEY

No significant developments are likely to occur during the forecast period; however, any attempt to monitor the situation is strongly recommended.

SOUTH-WEST ASIA**PAKISTAN**

Isolated adults may be present and breeding on a small scale at some places of the interior and coastal areas of the Makran. Surveys and any attempt to monitor the situation are strongly recommended in case of further and rapid changes in the current situation.

IRAN

Isolated adults may be present and breeding on a small scale at some places of the interior and coastal areas of Baluchistan, primarily near Chah Bahar. Surveys and any attempt to monitor the situation are strongly recommended in case of further and rapid changes in the current situation.

INDIA

Isolated adults are likely to be present and persist in Rajasthan. Surveys and any attempt to monitor the situation are strongly recommended in case of further and rapid changes in the current situation.

AFGHANISTAN

Although no significant developments are likely during the forecast period, surveys and any attempt to monitor the situation are strongly recommended in case of further and rapid changes in the current situation.



We wish to announce with deep regret the death in India of Mr Gurda Singh, who was former Senior Officer of the FAO Locust, Other Migratory Pests and Emergency Operations Group from 1964 to 1975. We wish to express our condolences to his family and government.

FAO organized a meeting in Cairo on the 14 January to assess the Desert Locust situation in the Near East and the control potential of the affected countries.

Another briefing meeting was held at FAO in Rome with donor countries to present the Desert Locust situation and examine the possibilities of emergency assistance.

1 February 1993

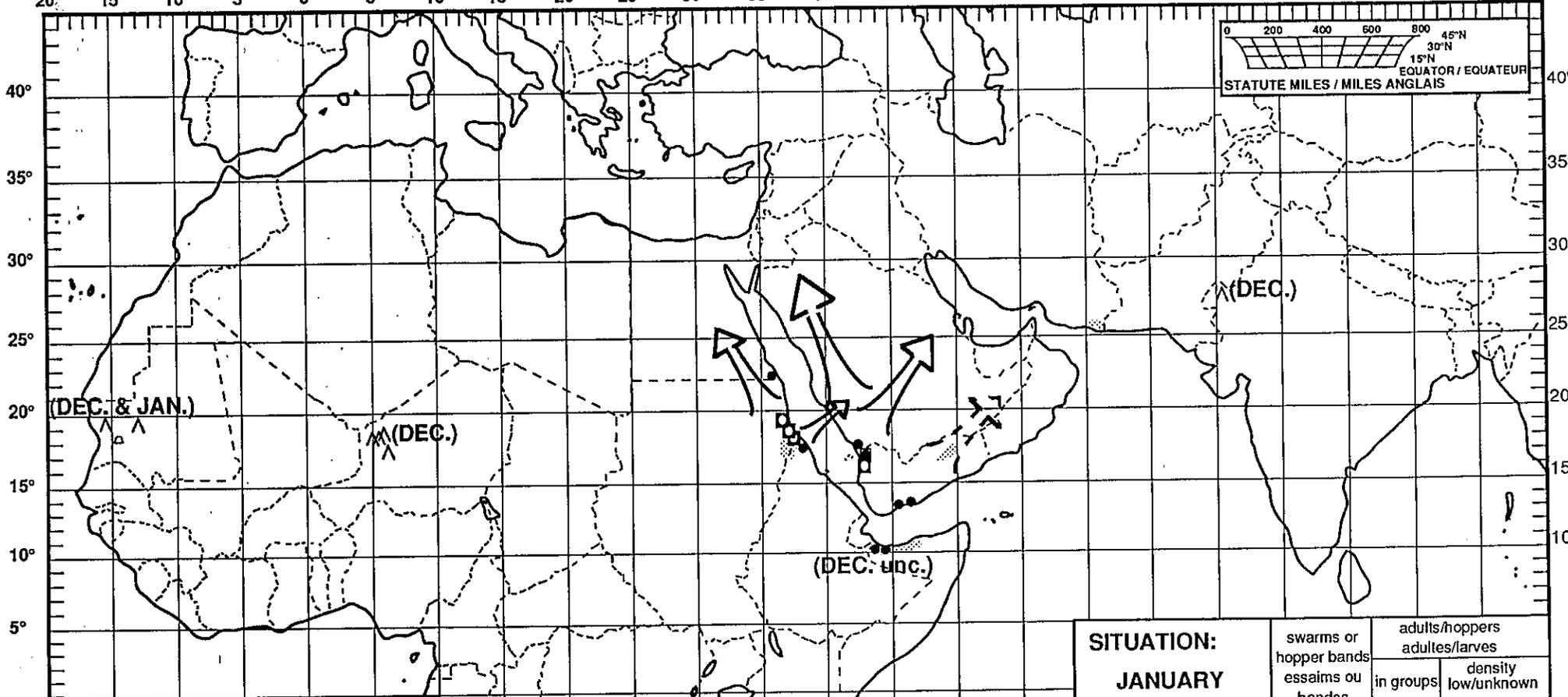
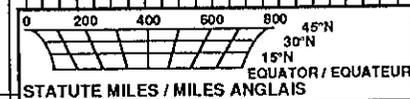


Desert Locust: summary Criquet pèlerin: situation résumée

No.173



20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45° 50° 55° 60° 65° 70° 75° 80° 85° 90° 95°



FORECAST TO: PREVISION AU:	15.3.93	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:
JANUARY 1993

	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)	◼	◼	◼

15° 20° 25° 30° 35° 40° 45°