

## **FAO DESERT LOCUST BULLETIN No. 146**

### **GENERAL SITUATION DURING OCTOBER 1990 FORECAST UNTIL MID DECEMBER 1990**

**The Desert Locust situation continues to remain calm with the only significant populations reported from the Indo-Pakistan summer monsoon breeding area and on the southern coast of Yemen. High concentrations of immature adults, up to 12,000 per sq. km., were reported in the Tharparkar desert of Pakistan in late September. These were treated and by mid-October only low density populations remained. Populations in the Indo-Pakistan summer monsoon breeding area will continue to decrease as adults move west toward Baluchistan and Mekran of Pakistan and south-eastern Iran, perhaps reaching Oman and UAE. On 20 October, several small mature groups of adults were seen on the southern coast of Yemen which may have been early arrivals from the Indo-Pakistan area. Some adults are likely to lay while others will probably move south-west toward the coastal plains of Aden. Some adults may have reached northern Somalia and Djibouti on 28-31 October as a result of a strong depression located over the Arabian Sea to the north-east of the Horn of Africa. Further immigration to Yemen on a similar scale is not expected due to recent control operations in Pakistan.**

In West Africa, the ITCZ continued to move south and no significant rainfall was reported in the recession area during October. Isolated adults and hoppers were present at several locations in central and southern Mauritania and are almost certainly present in the Adrar des Iforas and Tamesna of Mali; scattered adults were also reported from Tamesna and Air of Niger. Some of these populations will remain and continue to breed in areas of green vegetation while others are likely to move early in the forecast period toward winter-spring breeding areas of North West Africa. In Chad, scattered immature and mature adults and early instar hoppers were reported from one location in Tibesti in early October and it is likely that similar populations extend west to the Niger border and perhaps north to the Libyan border. Some of these adults will almost certainly remain in the area while others may move north-west toward the extreme south-west of Libya and south-east of Algeria.

A few isolated locusts were reported on the southern Tihama of Saudi Arabia and similar populations are likely to be present on the northern Tihama of Yemen where ecological conditions are favourable for breeding. No locusts have been reported to date along the Red Sea coast of Sudan where ecological conditions are expected to become favourable for breeding and small numbers of adults are likely to occur during the forecast period.

Scattered adults and hoppers continued to be present at several locations of Rajasthan in India but numbers will continue to decrease during the forecast period.



## WEATHER AND ECOLOGICAL CONDITIONS

During October, the ITCZ continued to move south from 18°N to between 12-15°N over West Africa. A high pressure system was located over the Sahara during the entire month. No significant rainfall was reported to have fallen in the recession areas of West Africa and Sudan, the Tihama of Saudi Arabia and Yemen, and the coastal plains west of Aden. ARTEMIS imagery indicated the amount and duration of rain-bearing clouds decreased during the first decade of October compared to the last decade of September over all of these areas except south-east Trarza and northern Assaba in Mauritania and the Kassala area of Sudan. During the second decade, there was a further decrease over all areas except Ouaddai of Chad and Tokar of Sudan. METEOSAT imagery indicated a substantial cloud mass over south-eastern Algeria and south-western Libya on the 29th.

Consequently, vegetation was reported as dry or becoming dry and breeding conditions were unfavourable throughout the Sahel except in some wadis and other low-lying areas of Adrar des Iforas and Tamesna of Mali and Tamesna and Air of Niger as indicated by ARTEMIS imagery. Breeding conditions may be favourable in some wadis in Tibesti of Chad and are likely to be improving along the Red Sea coast of Sudan, particularly near Tokar.

During the second half of October, northern Saudi Arabia and the northern Tihama received heavy rains as a result of eastward moving Mediterranean depressions. Breeding conditions were reported to be favourable on the southern Tihama of Saudi Arabia and the Tihama and eastern coastal plains of Yemen but unfavourable from Nisab to Bayhan in Yemen. METEOSAT imagery and the Bracknell model indicated a large depression over the Arabian Sea north-east of the Horn of Africa on 28 October which moved south-west reaching north-eastern Somalia by the 31st where rain is likely to have fallen.

In late September, light to moderate rain fell in Pakistan at Rahimyar Khan and Bahawalpur on the 25th and a dust storm followed by light rain occurred in Bahawalpur on the 29th. Localized light rainfall was reported in Cholistan during the first half of October. The weather remained dry in Rajasthan during the first half of October with the exception of light rainfall in Bikaner district on the 13th.



## AREA TREATED IN OCTOBER 1990

India (15-30 September)	82 ha
India (1-15 October)	56 ha
Pakistan (15-30 September)	600 ha



## WEST AFRICA

### MAURITANIA

During the last decade of September, isolated adults were seen at several locations in Hodh El Charki north of Nema, in Hodh El Gharbi near Aioun El Atrouss and east of Tamchekket, in Assaba near Boumdeid (1726N/1121W), in Trarza north-east of Boutilimit, in Tagant east of Tidjikja, and in Adrar south-west and south-east of Oujeft (2002N/1303W). First and second instar hoppers were also seen near the same areas in Tagant and Adrar.

During the first decade of October, isolated adults were seen at several locations in southern Trarza south-west of Boutilimit and at a few locations of Assaba and isolated second instar hoppers were reported west and south-west of Tidjikja in Tagant. Scattered adults were seen at a few locations in the two Hodhs during the first two decades of October.

### MALI

No locust surveys were carried out during the last decade of September.

During the first decade of October, scattered immature adults, at a density of 5-20 per ha, were reported over 300 ha from Hombori (1519N/0143W) on the 3rd. Isolated fifth instar hoppers were seen on the 7th at Timbabou (1614N/0254W).

### NIGER

A late report indicated that isolated adults were seen during surveys undertaken in the second decade of September at 5 locations east of Arlit near Aguellal massif (1840N/0815E). Isolated adults were also seen at a few locations in Tamesna between In Gall and Teguidda-n-Tessoumt, north of In-Abangharit, south of Arlit, and south-east of Agadez.

### CHAD

No locusts were seen during surveys undertaken in Kanem, Batha, Guera, and Lac during the last decade of September.

On 5 October, scattered immature and mature adults and first to third instar hoppers were seen in Tibesti at Enneri Korom (1940N/1744E) over an area of 15 ha at densities of 3-5 per ha.

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

## NORTH-WEST AFRICA

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

## EASTERN AFRICA

### SUDAN

The locust situation was reported clear during September and up to 23 October.

**DJIBOUTI, ETHIOPIA, KENYA, SOMALIA, TANZANIA, and UGANDA**

The locust situation was reported calm up to 30 September.

**NEAR EAST****KINGDOM OF SAUDI ARABIA**

A few isolated locusts were reported on the southern Tihama near Jizan during September and the first half of October. No further details were available.

**YEMEN**

During the first half of September, scattered mature adults were present in Ramlat Sabatayn from Nisab to Marib. No locusts were seen during surveys in Wadi Hadhramaut and the coastal plains west of Aden.

During the first week of October, a few adults were reported north of Nisab in Wadi Markhah (1440N/4625E). On the 20th, small groups of mature adults were seen attracted to light in coastal areas between Mukalla (1431N/4907E), Ash Shihr (1444N/4935E), and Ghayl Ba Wazir (1445N/4921E). An isolated adult was also reported at Aden.

**OMAN**

No locusts were reported 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, control operations were carried out against concentrations of immature adults, at densities of up to 12,000 per sq. km., on the 25th in Tharparkar desert at Ghunsla (2555N/7006E) and Mankau (2550N/7005E) over an area of 6 sq. km. Elsewhere, scattered adults were reported from several localities in the summer monsoon breeding areas of Cholistan, Khairpur, and Khipro deserts and north-east of Uthal.

During the first half of October, only low density adults were reported from areas previously controlled in Tharparkar. Scattered first to third instar hoppers, at a density of 1-2 hoppers per bush, were reported from Rukunpur (2820N/7202E) near the Indian border in Cholistan on the 11th.

**INDIA**

During the second half of September, scattered breeding was reported from Jaisalmer district at Karda (2623N/7015E) and Pochina (2621N/7015E) and low density hoppers were present at two localities of Bikaner district. Scattered adults were seen at 34 localities of Bikaner, Churu, Jaisalmer, Jodhpur, and Nagaur districts of Rajasthan with a maximum density of 2,100 per sq. km. reported at Surjara (2804N/7327E) in Bikaner. Control operations were carried out on 82 ha.

During the first half of October, scattered breeding was reported from Jaisalmer district at Nagraja (2628N/7053E) and Meghapar (2631N/7059E) on the 10th where control operations were carried out on 56 ha. Scattered adults were reported from 28 localities of primarily Bikaner and Barmer but also Jaisalmer and Jodhpur districts with a maximum density of 2,100 per sq. km. at Dewara (2622N/7055E) in Jaisalmer district on 10 October.

**IRAN**

A late report was received stating that scattered locusts were seen in parts of Sistan and Baluchistan provinces during August. No further details are available.

**AFGHANISTAN**

No locusts were reported during August and September.

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

**NEW ASSISTANCE REQUESTED**

No requests for assistance against Desert Locusts had been received up to 31 October.

**NEW ASSISTANCE PLEDGED**

No information regarding assistance against Desert Locusts had been received up to 31 October.

**ANNOUNCEMENTS**

We regret to announce the recent death of Mr. Din Atane Guindo of OCLALAV who had been involved in Desert Locust surveys for the past 30 years and wish to express our condolences to his family and OCLALAV.

 <b>FORECAST UNTIL MID DECEMBER 1990</b>
---

## WEST AFRICA

### **MAURITANIA**

Numbers may increase in western regions, specifically Trarza, Tagant, Inchiri, western Adrar, and Dakhlet Nouadhibou as adults move westwards; small numbers of adults may also occur in Tiris-Zemmour. These adults will breed on a small scale in areas of recent rainfall. A few isolated populations may persist in the two Hodhs.

### **MALI**

Scattered adults are almost certainly present in wadis and other low-lying areas of Tamesna and Adrar des Iforas. These will persist and breed on a small scale during the forecast period.

### **NIGER**

Scattered adults will persist and breed on a small scale in areas of green vegetation in Tamesna and Air during the forecast period.

### **CHAD**

Scattered adults are likely to be present and breeding over a widespread area of Tibesti from Enneri Korom west to the Niger border perhaps extending further north in the wadis north-east and north-west of Bardai.

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

No significant developments are likely and no invasions are expected.

## NORTH-WEST AFRICA

### **MOROCCO**

Early in the forecast period, small numbers of adults from summer breeding areas of the Sahel could reach Oued Draa where scattered adults may already be present. Similar populations may be present in extreme south-western parts of the Sahara in Adrar Soutouf and inland from Dakhla and Layoune.

### **ALGERIA**

Early in the forecast period, small numbers of adults from summer breeding areas of the Sahel could reach the extreme south-west extending into the area around the Tademait Plateau, Adrar N'Ahnet, and Monts du Mouydir where scattered adults may already be present in wadis and other run-off areas. Small numbers of adults from Tibesti of Chad may also occur in the extreme south-east near Djanet.

### **LIBYA**

Small numbers of adults may reach the extreme south of Fezzan from Tibesti of Chad early in the forecast period.

### **TUNISIA**

No significant developments are likely and no invasions are expected.

## EASTERN AFRICA

### **SUDAN**

Scattered adults, initially at low numbers, are likely to be present and breed in wadis and other low-lying areas of the Red Sea coastal plains. No significant invasions are expected from adjacent areas in the region during the forecast period.

### **ETHIOPIA**

A few isolated adults may be present in northern Eritrea and breed in wadis and other areas that received run-off from any rainfall that occurs.

### **DJIBOUTI**

Small numbers of adults from the southern coast of Yemen may be present on the northern coastal plains.

### **SOMALIA**

Small numbers of adults from the southern coast of Yemen may be present on the northern coastal plains and will start to breed in areas which receive rain.

### **KENYA, TANZANIA, and UGANDA**

No significant developments are likely and no invasions are expected.

## NEAR EAST

### **KINGDOM OF SAUDI ARABIA**

Scattered adults are likely to be present on the southern Tihama from Lith to the Yemen border and breeding may be in progress in wadis and other areas that receive run-off from rainfall.

### **YEMEN**

Scattered adults are likely to be present on the northern Tihama and breeding may be in progress in wadis and other areas that receive run-off from rainfall. Some adult groups will persist and breed on the coastal plains from Mukalla to Sayhout while others will move south-west toward the coastal plains west of Aden. A few adults may be persist from Nisab to Wadi Al Jawf.

### **OMAN**

Scattered adults may occur on the Batinah coast and the Musandam Peninsula as populations continue to move out of the Indo-Pakistan summer monsoon breeding areas.

### **UAE**

Scattered adults may occur in Fujairah as populations continue to move out of the Indo-Pakistan summer monsoon breeding areas.

### **BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, QATAR, SYRIA, and TURKEY**

No significant developments are likely and no invasions are expected.

## SOUTH-WEST ASIA

### **PAKISTAN**

Small to moderate numbers of adults are likely to occur in Baluchistan and Mekran as populations move out of the summer monsoon breeding areas. Only scattered adults are likely to remain in Cholistan and Tharparkar.

**INDIA**

Populations will decrease in the summer monsoon breeding areas of Rajasthan as adults move toward the west and only scattered adults are likely to remain.

**IRAN**

Small to moderate numbers of adults are likely to occur in the provinces of Sistan and Baluchistan as populations move out of the Indo-Pakistan summer monsoon breeding areas.

**AFGHANISTAN**

No significant developments are likely and no invasions are expected.

*31 October 1990*

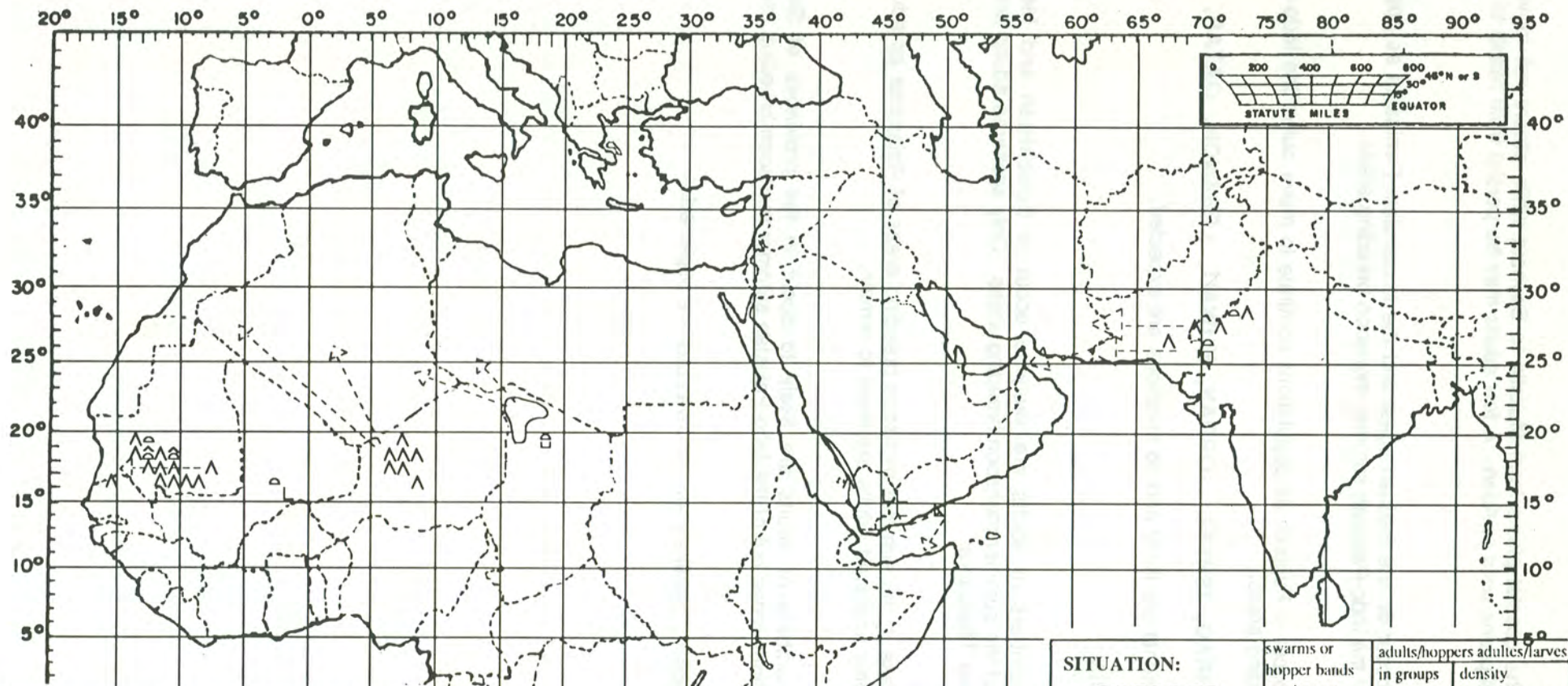


See also map No. 147



# Desert Locust: summary Criquet Pèlerin: situation résumée

No. 146



FORECAST TO: PREVISION AU:	<b>15.12.90</b>	LIKELY / PROBABLE	POSSIBLE POSSIBLE
current undetected breeding / reproduction en cours non détectées			
major swarm(s) / essaim(s) important(s)			
minor swarm(s) / essaim(s) limité(s)			
non swarm / aîlés non essaimant			

<b>SITUATION: OCTOBER 1990</b>	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers en groupes	adultes/larves density low/unknown densité faible/inconnue
--	---	------------------------------	--

immature adults aîlés immatures			
mature or partly mature adults aîlés matures ou partiellement matures			
adults, maturity unknown aîlés, maturité inconnue			
egg laying or eggs pontes ou œufs			
hoppers larves			
hoppers & adults (combined symbol example) larves & adultes (exemple de symbole combiné)			