

## **FAO DESERT LOCUST BULLETIN No. 155**

### **GENERAL SITUATION DURING JULY 1991 FORECAST UNTIL MID-SEPTEMBER 1991**

**The recession continues with only isolated adults reported in Rajasthan of India during July. Seasonal rains have started in the summer monsoon breeding areas of India and Pakistan and, as a result, small scale laying may already be in progress in some areas with hatching likely to start in the first half of August. During the forecast period, a small scale increase in the overall locust population will occur in Rajasthan and adjacent border areas of Pakistan as a result of breeding, but is not expected to be on a significant scale.**

The situation remains unclear in the summer breeding areas of the Sahel of West Africa and Sudan as no surveys were carried out during July. However, scattered adults are likely to be present in south-eastern Mauritania, the Adrar des Iforas, Tamesna, and Gourma of Mali, Tamesna, Tahoua, and Air of Niger, western, central, and eastern Sudan, and perhaps central Chad. Small scale breeding may be in progress in these areas and will continue since conditions are presumed to be favourable and are likely to remain so in most areas as a result of recent rains. Surveys are recommended in all areas of recent rainfall to monitor the locust situation.

A late report stated that isolated immature adults were present in areas of green vegetation on the southern Tihama of Saudi Arabia in June. These may breed on a small scale during the forecast period.



## WEATHER AND ECOLOGICAL CONDITIONS

**This information is compiled from field reports, METEOSAT and ARTEMIS satellite imagery, and daily Météo-France synoptic charts and rainfall data.**

During July, the ITCZ continued its seasonal movement northward, oscillating primarily between 15°N and 20°N over the Sahel of Africa but moving as far north as 26°N over south-west Algeria on the 4th and 17th. Satellite imagery indicated a similar movement of rain-bearing clouds over locust summer breeding areas of the Sahel during the month. Substantial clouds were seen on ARTEMIS and METEOSAT over south-eastern Mauritania during the first decade and over central Mauritania during the second decade. In Mali, clouds were present over central areas during the first decade and moved to northern areas of the Adrar des Iforas and Tamesna by the end of the second decade. Similarly, clouds were seen over northern areas of Tamesna and southern Air of Niger and have reached as far north as 16°N over central Chad and western, central, and eastern regions of Sudan by the end of the second decade.

Light to moderate rainfall was reported from several localities in central and northern parts of Sahelian countries during the month. For example, in south-eastern Mauritania, Aioun El Atrouss received 48 mm on the 10-13th; in central Mauritania, Tidjikja reported 8 mm on the 12-13th, and in the north, Bir Moghreïn received 14 mm on the 14-18th. Widespread rain fell in central Mali and in the Adrar des Iforas on the 10th; Gao received 23 mm and Tessalit 10 mm. Widespread rain also fell on the 14-15th in central and eastern Sudan where En Nahud received 9 mm, Kosti 6 mm, Wad Medani 14 mm, and Gedaref 34 mm. In western Sudan, Geneina reported 46 mm on the 21-22nd and in the eastern region, Kassala received 18 mm on the 23-24th. As a result of these rains and those likely to have occurred from clouds seen on satellite imagery, breeding conditions are presumed to be favourable in parts of central and south-eastern Mauritania, the Adrar des Iforas and Tamesna of Mali, Tamesna and southern Air of Niger, central Chad, and Northern Darfur, Northern Kordofan, White Nile, and eastern areas near Kassala of Sudan.

Satellite imagery indicated substantial cloud activity during the first two decades of July over the Tihama of Yemen and southern Red Sea coast of Ethiopia which may have produced moderate rains and, to a lesser degree, over the southern Tihama of Saudi Arabia. As a result, breeding conditions are likely to be improving in some areas of the southern Tihama of Saudi Arabia and along the Tihama of Yemen. Clouds were also seen over Wadi Hadhramaut of Yemen during the first decade, becoming widespread over Ramlat Sabatayn and the east coast during the second decade which may have resulted in light rainfall. Further east, traces of rain fell throughout the month at Salalah, Oman.

Summer monsoon rains arrived by mid-July in the Thar desert of Pakistan and India where Jodhpur received 64 mm between the 17-25th, Jaisalmer 12 mm on the 18th, and 82 mm fell in Nagarparkar desert of Pakistan on 16-19th. As a result, breeding conditions are expected to be improving in most areas of Rajasthan and adjacent desert areas of Pakistan.



## AREA TREATED IN JULY 1991

No control operations were reported during July.



## WEST AFRICA

### **MALI**

A late report stated that no surveys for Desert Locusts were carried out during June; however, travellers reported isolated adults in some places. No further details are available.

### **CHAD**

No locusts were reported up to 20 July.

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

## NORTH-WEST AFRICA

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

## EASTERN AFRICA

### **SUDAN**

No surveys for Desert Locusts were carried out up to 21 July.

### **ETHIOPIA**

No locusts were reported up to 15 July. Swarms reported in Bulletin No. 153 near Error were confirmed as grasshopper infestations.

### **SOMALIA**

No surveys for Desert Locusts were undertaken during April, May and June.

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

No locust activity was reported up to 15 July.

## NEAR EAST

### **SAUDI ARABIA**

A late report stated that scattered immature adults were present at several locations near Ghumayqah (2015N/4030E) on the Tihama east of Lith during June.

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

## SOUTH-WEST ASIA

### **AFGHANISTAN**

No locust activity was reported up to 30 June.

### **PAKISTAN**

No locust activity was reported during the last fortnight of June and the first fortnight of July.

### **INDIA**

During the second fortnight of June, isolated adults were present at six localities in Bikaner district at a maximum density of 150 per sq. km., at one locality in Barmer district at a maximum density of 15 per sq. km., and at six localities in Jaisalmer district, at a maximum density of 450 per sq. km. on the 26th at Rohidiwala (2747N/7140E).

During the first fortnight of July, isolated adults were reported at Pachpadra (2656N/7215E) in Barmer district on the 3rd and at three localities in Bikaner district at a maximum density of 150 per sq. km. at Bithanoke (2752N/7243E) on the 7th.

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



## WEST AFRICA

### **MAURITANIA**

Isolated adults are likely to be present and small scale breeding may be in progress in areas of recent rainfall in southern Tagant, the two Hodhs, Assaba and Trarza, with hoppers appearing during the forecast period.

### **MALI**

Scattered adults are likely to be present and small scale breeding is likely to be in progress in areas of recent rain in Adrar des Iforas, Tamesna and Gourma.

### **NIGER**

Scattered adults are likely to be present and small scale breeding is likely to be in progress in areas of recent rain in Tamesna, Air and northern Tahoua.

### **CHAD**

Isolated adults are likely to be present and small scale breeding may be in progress in some areas of recent rainfall in Lake, Kanem, Batha, Biltine and Ouaddaï regions.

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

No significant developments are likely.

## NORTH-WEST AFRICA

### **ALGERIA, LIBYA, MOROCCO and TUNISIA**

No significant developments are likely.

## EAST AFRICA

### **SUDAN**

Isolated adults are likely to be present and breeding in areas of recent rainfall in Northern Kordofan near En-Nahud and in White Nile province. Isolated adults may be present in Northern Darfur and in the eastern region near Kassala and start to breed in areas of recent rain during the forecast period.

### **ETHIOPIA**

The locust situation remains unclear; however, isolated adults may be present in some areas of Eritrea.

### **SOMALIA**

The locust situation remains unclear; however, isolated adults may be present in some areas of the northern coastal plains.

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

No significant developments are likely.

## NEAR EAST

### **KINGDOM OF SAUDI ARABIA**

Isolated adults are likely to persist along some wadis of the southern Tihama and may start to breed by the end of the forecast period in areas of green vegetation.

### **YEMEN**

Isolated adults may be present and breeding in areas of recent rainfall on the Tihama. Isolated adults are likely to persist in Wadi Hadhramaut and may be present on the eastern coast and start to breed by the end of the forecast period in areas of green vegetation.

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

No significant developments are likely.

## SOUTH-WEST ASIA

### **PAKISTAN**

Adult numbers will increase in Cholistan and Tharparkar deserts and small scale breeding will commence in areas of rainfall during the forecast period.

### **INDIA**

Locust numbers will increase in Bikaner, Jaisalmer, Jodhpur and Barmer districts of Rajasthan where small scale breeding may have already commenced in areas of recent rains with hatching likely in early August. Otherwise, breeding will start during the forecast period. Isolated adults may appear in Churu and Nagaur districts.

### **AFGHANISTAN and IRAN**

No significant developments are likely.



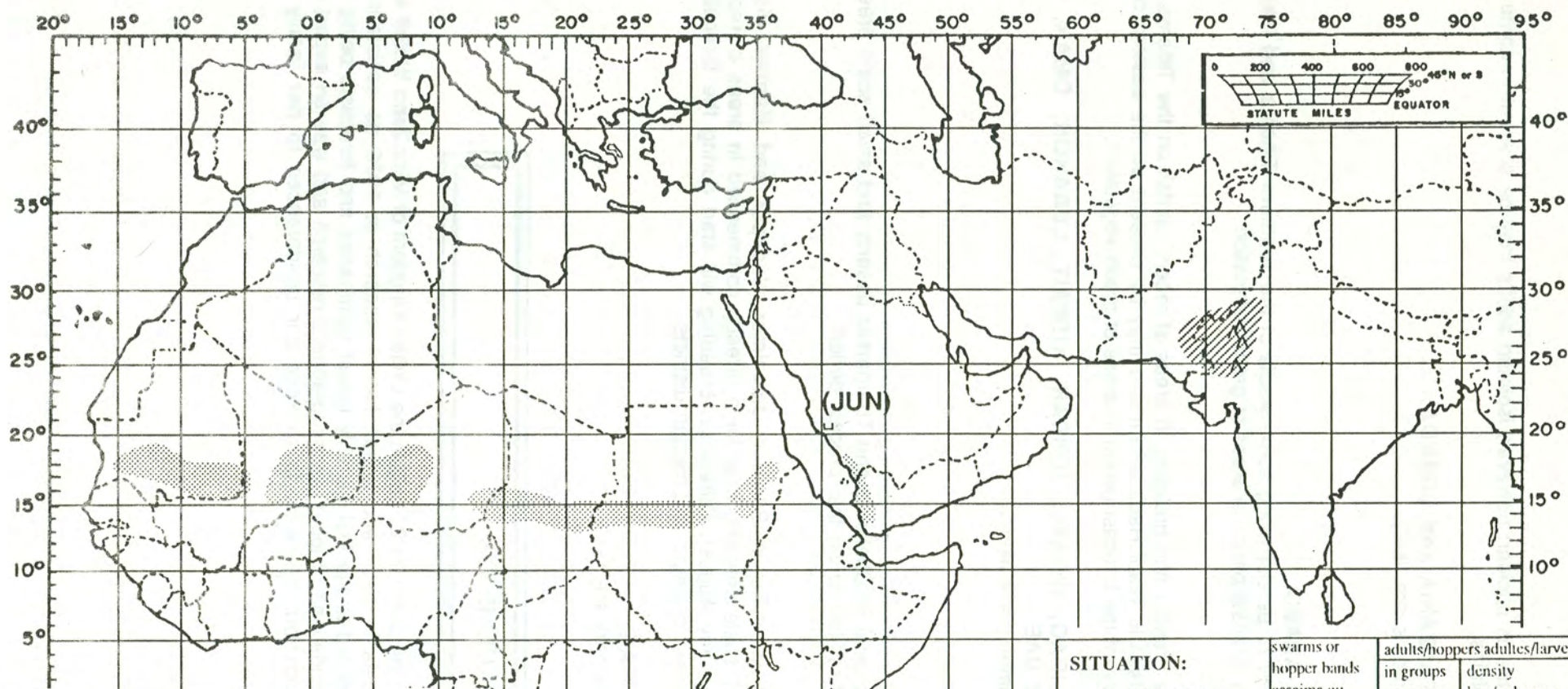
We regret to announce the death on 21 July in the United Kingdom of Miss Zena Waloff who came to the U.K. from Russia in 1917 and began locust research in 1929 as assistant to Boris Uvarov. Her early work led to the first monthly locust summaries and forecasts being issued in 1942. She laid the foundations of locust biogeographical research and was an expert on locust movements and distribution. We wish to express our condolences to her family and her government.

*1 August 1991*



# Desert Locust: summary Criquet Pèlerin: situation résumée

No. 155



FORECAST TO: PREVISION AU:	<b>15.9.91</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			

**SITUATION:**  
**JULY 1991**

	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers in groups en groupes	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 et adultes (exemple de symbole combiné)	◼	◼	◼