

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 288

(3 Oct 2002)



General Situation during September 2002 Forecast until mid-November 2002

The Desert Locust situation remained calm during September. Despite good rainfall and ecological conditions in the summer breeding areas of West Africa, Sudan and India, only a few hoppers were reported in Mauritania and Niger, and insignificant numbers of adults were present in northern Mali and eastern Pakistan. Local breeding occurred in southern Yemen resulting in small hopper groups. Unusually heavy rains fell along the southern Red Sea coastal plains that should lead to small-scale breeding during the forecast period.

Western Region. Isolated adults and a few solitarious hoppers were present in parts of southern Mauritania and western Niger. Scattered adults were also reported in northern Mali. The good rains that fell in many of these areas is likely to allow breeding to continue on a small-scale during the forecast period. Consequently, locust numbers are likely to increase but remain below threatening levels. Low numbers of locusts are likely to appear in western and northwestern Mauritania. No locusts were reported elsewhere in the region and no significant developments are expected.

Central Region. Results are awaited from surveys that are in progress in western and central Sudan where good rains fell during September in the summer breeding areas. Small-scale breeding has been reported from a traditional outbreak area on the southern coast of Yemen near Aden where groups of hoppers and fledglings were seen at one location while breeding was reported in another area nearby. Unusually heavy rain fell in the winter breeding areas along the southern coast of Eritrea, Djibouti and along the Red Sea coast of Yemen and adjacent areas of Saudi Arabia. Although no locusts were reported in these areas, conditions will improve to allow the possibility of small-scale breeding during the forecast period. No locusts were reported elsewhere in the region.

Eastern Region. Although breeding conditions are reported to be more favourable in Rajasthan, India than in adjacent summer breeding areas in Pakistan, only isolated adults were seen in the latter area. No significant developments are likely in the region.

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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No. 288

DESERT LOCUST BULLETIN



Weather & Ecological Conditions in September 2002

Good rains fell in parts of the Sahel of West Africa and Sudan where conditions continued to be favourable for breeding. Unusually heavy rains fell along both sides of the southern Red Sea where conditions are already favourable in many areas. In the summer breeding areas along the Indo-Pakistan border, conditions were more favourable in India than in Pakistan.

In the **Western Region**, the Inter-Tropical Convergence Zone (ITCZ) oscillated between 10N and 25N during September with periodic surges to 22N over northern Mali on 11 and 18 September and 25N over southern Algeria on the 8th and 23rd. The unusually large fluctuation and the northward surges were associated with several depressions over the Mediterranean and the central Sahara. Consequently, good rains fell in many of the summer breeding areas between Mauritania and Chad. In Mauritania, rains were sporadic in southern areas during the first dekad of September but improved during the remainder of the month. In northern Mauritania, unusually good rains fell at Akjoujt (44 mm) and isolated showers are likely to have occurred near Bir Moghreïn and in El Hank. Although conditions remain favourable for breeding in the south (Trarza, Brakna, the two Hodhs), some areas were starting to dry out by the end of the month. In northern Mali, moderate rains fell at times in Timetrine, the Adrar des Iforas and Tamesna where conditions continued to be favourable for breeding. In Niger, favourable breeding conditions persisted in southern and central Tamesna where good rains fell during the second half of the month and parts of southern Air. In Chad, good rains fell in the east near Abeche that will allow breeding conditions to remain favourable. Lighter rains fell in the northeast near Fada where green vegetation is present in the Ennedi Hills. In southern Algeria, light rains fell a few times, associated with northward surges of the ITCZ and depressions over the Mediterranean. Consequently, breeding conditions were improving in wadis and run-off areas near the Hoggar Mountains. In southern and southeastern Morocco, vegetation was reportedly becoming dry and conditions unfavourable for breeding because of a lack of rainfall.

In the **Central Region**, good rains fell for the second consecutive month in the summer breeding areas of central and western Sudan and in the western lowlands of Eritrea. Consequently, breeding conditions continued to be favourable in Northern Darfur, Northern Kordofan and White Nile provinces in Sudan and along Khor Barka in western Eritrea. Light rains fell in eastern Ethiopia and in some places on the escarpment in northwestern Somalia. Significant cloud activity was seen for the second month in a row along the Red Sea coast from Massawa, Eritrea to Djibouti. Moderate rains were reported in coastal and interior areas of Djibouti city and additional rainfall may have occurred in adjacent areas of the southern coast of Eritrea. Breeding conditions are likely to be improving in all of these areas. Moderate to heavy rains fell along the Red Sea coastal plains between Qunfidah, Saudi Arabia and Bait Al-Faqih, Yemen. In many of these places, good rains have fallen throughout most of the summer, suggesting that conditions are favourable in the winter breeding areas earlier than in most years. Conditions were also favourable for breeding on the southern coastal plains of Yemen near Aden where heavy showers fell in early September. Isolated light to moderate rainfall was reported in the interior of Yemen, extending to the edge of the Empty Quarter at Sharurah, Saudi Arabia where 37 mm were reported in early September. In northern Oman, light to moderate rainfall was reported at a few places in the interior.

In the **Eastern Region**, light to moderate rains fell during the first half of September in Barmer, Jaisalmer and Jodhpur areas in Rajasthan, India where conditions were reported to be favourable for breeding. In Pakistan, light rains fell in Cholistan at Bahawalpur and in the Tharparkar Desert at Chhor. Breeding conditions were said to be less favourable than in India.



Area Treated

No control operations were reported in September.



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

During September, isolated immature and mature adults were present at several places near Oualata

(1715N/0655W), north of Aioun El Atrous (1702N/0941W) and, to a lesser extent, between Tidjikja (1829N/1131W) and Moudjeria (1751N/1228W). Small-scale breeding was in progress near Aioun and Oualata where isolated second to fifth instar hoppers and copulating adults were seen from the second week of September onwards. No locusts were seen during surveys in the southwest near Rkiz.

• **FORECAST**

Locust numbers will increase slightly as small-scale breeding continues during the forecast period in the south and centre of the country. Scattered adults are likely to appear in the southwest as well as in Inchiri where breeding could occur in areas of recent rainfall.

Mali

• **SITUATION**

During September, nomads reported seeing scattered immature and mature adults in the Adrar des Iforas at Tahalt (1912N/0052E), in the Timetrine at Terchichout (1922N/0010W) and Aril (1910N/0005W), and near Gao at In Azar (1627N/0022E).

• **FORECAST**

Scattered adults are likely to persist in areas of recent rainfall in the Adrar des Iforas, Tilemsi, Timetrine and Tamesna. Small-scale breeding is expected to continue during the forecast period and locust numbers will gradually increase but remain below threatening levels.

Niger

• **SITUATION**

No locusts were seen during surveys carried out south of Agadez and in Tamesna from 26 July to 31 August except at one place, Anes Baraka (1831N/0552E), near In Abangharit where solitary immature adults were present at densities of 5-10 locusts per ha on the 21st.

Small-scale breeding occurred during September northwest of Agadez where isolated first to third instar hoppers were seen at Aouguessess (1744N0715E) on the 12th. Isolated immature adults were present in Tamesna at two locations west of In Abangharit (1754N/0559E) and at another two locations southeast of Agadez.

• **FORECAST**

Scattered adults will persist and breed on a small-scale in Tamesna and in western Air. Although locust numbers will increase slightly as a result, no significant developments are likely.

Chad

• **SITUATION**

No reports received.

• **FORECAST**

Scattered adults may be present and breeding on a

small-scale in areas of recent rainfall in the east and northeast between Abeche and Fada and in adjacent areas of the Ennedi Hills.

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.

Algeria

• **SITUATION**

No locusts were reported during September.

• **FORECAST**

No significant developments are likely.

Morocco

• **SITUATION**

No locusts were reported during September.

• **FORECAST**

No significant developments are likely.

Libyan Arab Jamahiriya

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Tunisia

• **SITUATION**

No locusts were reported during September.

• **FORECAST**

No significant developments are likely.

CENTRAL REGION

Sudan

• **SITUATION**

No locusts were seen during surveys carried out on 5-7 September in the north near Atbara (1742N/3400E). Surveys are in progress in Northern Kordofan.

• **FORECAST**

Scattered adults are likely to present and breeding on a small scale in Northern Darfur, Northern



No. 288

DESERT LOCUST BULLETIN



No. 288

DESERT LOCUST BULLETIN

Kordofan, White Nile and Nahr El Nile States as well as in the Eastern Region north of Kassala. During the forecast period, locust numbers should decline in the summer breeding areas while low numbers of adults may appear on the Red Sea coastal plains.

Eritrea

• SITUATION

No reports received.

• FORECAST

Scattered adults may be present in parts of the western lowlands along Khor Barka and in adjacent areas because of undetected local breeding. During the forecast period, locust numbers will decline in the western lowlands and increase along the Red Sea as scattered adults appear and breed in areas of recent rainfall.

Somalia

• SITUATION

No locusts were seen during surveys on the escarpment between Boroma (0956N/4313E) and Berbera (1028N/4502E) on 15-19 September.

• FORECAST

No significant developments are likely.

Ethiopia

• SITUATION

No locusts were seen during surveys carried out near Dire Dawa and in adjacent areas to the north on 19-22 September.

• FORECAST

No significant developments are likely.

Djibouti

• SITUATION

No locusts were seen during surveys carried out on the coastal plains between Djibouti town and the Somali border, on the northern coast from Tadjourah (1147N/4253E) and Obock (1157N/4317E) to the Eritrean border and in the interior near Ali Sabieh (1109N/4242E) and the Ethiopian border.

• FORECAST

A few scattered adults may appear on the coastal plains north of Obock during the forecast period. No significant developments are likely.

Kenya, Tanzania and Uganda

• FORECAST

No significant developments are likely.

Egypt

• SITUATION

In the Western Desert, ground teams treated 38 ha of African Migratory Locust mixed with a few Desert Locust hoppers and adults in cropping areas at Sharq Oweinat (2237N/2845E) on 4 September.

• FORECAST

No significant developments are likely.

Saudi Arabia

• SITUATION

No locusts were reported during September.

• FORECAST

Scattered adults are likely to be present in areas of recent rainfall along the Red Sea coastal plains between Qunfidah and Jizan where small-scale breeding is expected during the forecast period.

Yemen

• SITUATION

On 6 September, mature adults were seen copulating and laying on the coastal plains northwest of Aden. By the end of the month, solitary and transiens fourth to sixth instar hoppers at densities of 2-13 hoppers per sq. m and fledglings at densities of 350-1500 adults per ha were present within an area of 2000 ha near Am Rija (1302N/4434E). Nearby, adults were seen copulating and laying. No locusts were seen during surveys carried out in September in the interior near Al Hazm (1609N/4447E), on the Red Sea coastal plains and near Aden.

• FORECAST

On the coastal plains west of Aden, small groups of adults may form and additional hatching is likely to occur that could lead to the formation of small groups of hoppers. As local conditions become dry, the adults are expected to move towards the Red Sea coastal plains where scattered adults may already be present and breeding on a small scale in areas of recent rainfall.

Oman

• SITUATION

No locusts were reported in Musandam during September.

• FORECAST

No significant developments are likely.

United Arab Emirates

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

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

• FORECAST

No significant developments are likely.

EASTERN REGION

Iran

• SITUATION

No locusts were reported in Kerman, Hormozgan and Sistan-Baluchistan provinces during September.

• FORECAST

No significant developments are likely.

Pakistan

• SITUATION

During the second half of August, isolated immature and mature adults, at densities of 1-4 adults per ha, were seen at five places in the Cholistan Desert along the Indian border south of Bahawalpur, at three places in Tharparkar and at three places near Las Bela west of Karachi.

During the first half of September, similar populations and densities persisted at eight places in Cholistan and three in Tharparkar.

• FORECAST

Locust numbers will continue to decline in Tharparkar and Cholistan and, unless further rains fall, the situation should be calm by the end of the forecast period. There is no evidence to suggest that significant numbers of locusts will appear from the east.

India

• SITUATION

No locusts were seen during surveys carried out in the summer breeding areas of Rajasthan and Gujarat during the first half of September.

• FORECAST

No significant developments are likely.

Afghanistan

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

 **Announcements**

Locust reporting. Affected countries are kindly reminded to make sure that all locust situation reports are sent to FAO HQ by the 28th 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.

Reporting by e-mail. After each survey or control operation, affected countries should send completed *FAO Desert Locust Survey and Control Forms* with a brief interpretation of the results by e-mail to eclo@fao.org.

Desert Locust Guidelines. The revised edition in English was issued on 24 September 2001 and is now available from FAO. Please contact the Locust Group for more information.

eLocust. Details of a new system under evaluation for recording and transmitting locust survey and control data collected in the field can be found on the Internet at: www.fao.org/news/2001/010601-e.htm

Publications on the Internet. A list of publications that can be downloaded from the FAO Locust webpages is now available (www.fao.org/news/global/locusts/pubslst.htm). New additions are:

- Report of the 23rd session of the NW Africa Commission (CLCPANO) in French and Arabic
- Report of the 36th session of the DLCC recently held in Rome (English and French; Arabic upon request)
- FAO Desert Locust Guidelines, revised edition, 2001 (English)
- FAO Spray Monitoring Form (English)

Desert Locust research award. The FAO Commission for Controlling the Desert Locust in the Central Region (CRC) is pleased to announce a cash award for outstanding research on Desert Locust. For more details, please contact the CRC Office in Cairo (munir.butrous@fao.org).



No. 288

DESERT LOCUST BULLETIN

page 5 of 8



No. 288

DESERT LOCUST BULLETIN

CLCPRO. It was decided at the first session of the Commission held in Rome on 18-20 September to establish the Commission's seat in Alger, Algeria. The 2nd session will be held in Alger in June 2003.

2002 events. The following are scheduled:

- **EMPRES/WR.** Improved locust control application techniques regional workshop, Nouakchott (Mauritania), postponed (tba)
- **EMPRES/CR.** Training of trainers workshop, Oman, 7-17 October
- **EMPRES/CR.** 10th Liaison Officers meeting, Jeddah (Saudi Arabia), 27-31 October
- **SW Asia Commission.** 23rd Session, Islamabad (Pakistan), 16-20 December

2003 events. The following are provisionally scheduled:

- **EMPRES/WR.** 1st Liaison Officers meeting, Niamey (Niger), 27-31 January
- **DLCC Technical Group.** FAO Rome, 24-26 February
- **EMPRES.** 6th Consultative Committee and Phase III Planning Workshop, Cairo (Egypt), 24-28 March
- **CRC.** 24th Session of the Executive Committee, Beirut (Lebanon), April
- **CLCPANO.** 24th Session, Tripoli (Libya), 4-8 May
- **CLCPRO.** 2nd Session, Alger (Algeria), June
- **DLCC.** 37th Session, FAO Rome, 22-26 September



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.

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.

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.



No. 288

DESERT LOCUST BULLETIN

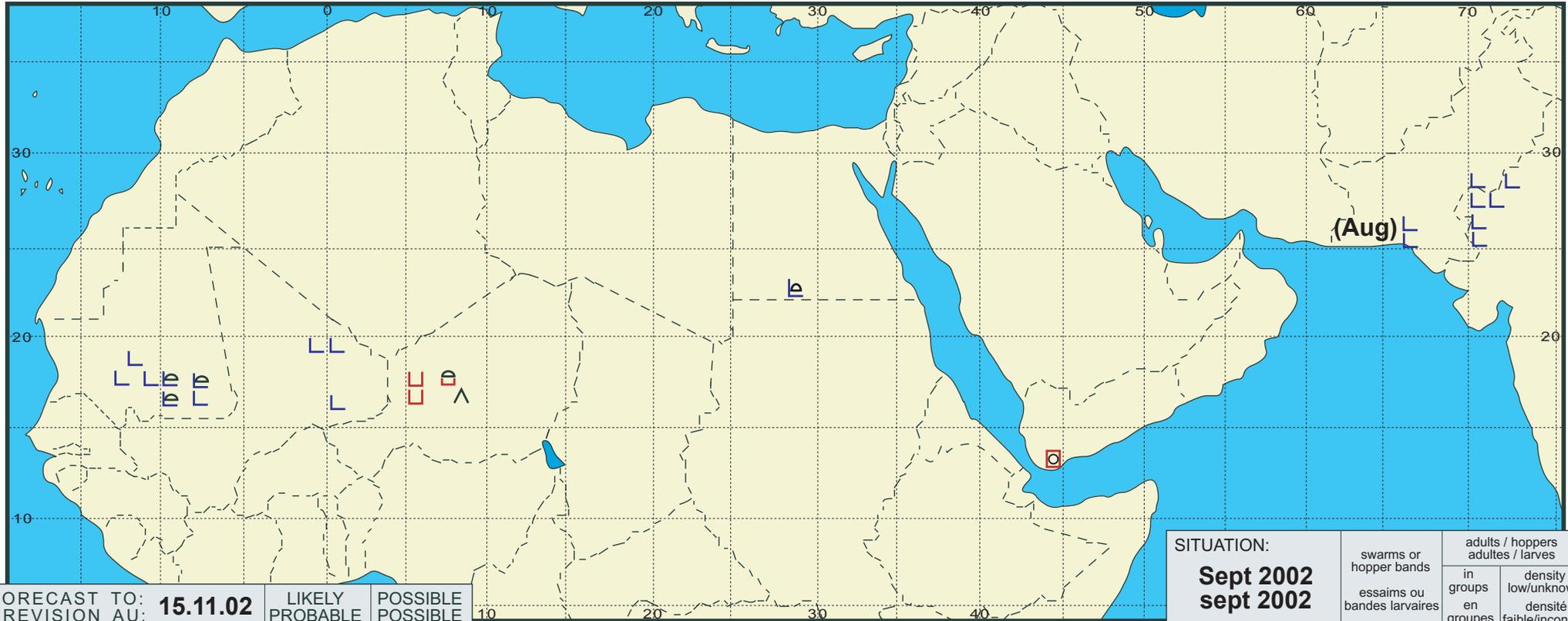
page 7 of 8



Desert Locust Summary

Criquet pèlerin - Situation résumée

288



FORECAST TO: PREVISION AU: 15.11.02	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: Sept 2002 sept 2002	swarms or hopper bands	adults / hoppers adultes / larves	
	essaims ou bandes larvaires	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)			

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)			