

warning level: **CALM**

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 442



**General Situation during July 2015
Forecast until mid-September 2015**

(3.8.2015)

The Desert Locust situation remained calm during July. No locusts were present except for low numbers of solitarious adults in northern Sudan. By the end of the month, good rains had fallen throughout most of the summer breeding areas in the northern Sahel between Mauritania and Eritrea. Consequently, small-scale breeding during the forecast period will cause locust numbers to increase slightly in all countries. Unusually heavy and widespread rains fell in the summer breeding areas along both sides of the Indo-Pakistan border and may give rise to favourable conditions sufficient for two generations of breeding. Intensive monitoring should be carried out in both countries in the coming months to detect increases in locust numbers.

Western Region. The situation remained calm in July. No locusts were reported in the region as summer surveys did not start yet in Sahelian countries. Good rains fell in the northern Sahel from southeast Mauritania to eastern Chad that will cause ecological conditions to improve and become favourable for breeding. Consequently, small-scale breeding will occur during the forecast period, causing locust numbers to increase slightly in southern Mauritania, northern Mali and Niger, central and eastern Chad, and perhaps in the extreme south of Algeria. Dry conditions prevailed in Northwest Africa.

Central Region. The situation remained calm during July. Low numbers of solitarious adults were present near cropping areas along the Nile Valley in northern Sudan. As good rains fell in the summer breeding areas from Darfur to the lowlands in western Eritrea, small-scale breeding is expected to occur during the forecast period, causing locust numbers to increase slightly in both countries. Elsewhere, primarily dry conditions prevailed and no significant developments are likely.

Eastern Region. No locusts were reported and the situation remained calm during July. Unusually heavy and widespread rains fell along both sides of the Indo-Pakistan border during the last decade of July. This will cause extremely favourable breeding conditions to develop that could lead to two generations of breeding this summer in Rajasthan, India. During the forecast period, a first generation of breeding will occur, causing locust numbers to increase.

The FAO Desert Locust Bulletin is issued every month by the Desert Locust Information Service, AGP Division (Rome, Italy). It is supplemented by Alerts and Updates during periods of increased Desert Locust activity. All products are distributed by e-mail and are available on the Internet.

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Weather & Ecological Conditions in July 2015

Good rains fell in the summer breeding areas of the northern Sahel from Mauritania to western Eritrea. Unusually heavy rains fell along both sides of the Indo-Pakistan border.

In the **Western Region**, the Inter-Tropical Convergence Zone (ITCZ) moved northwards over the southern Sahel of West Africa during July. In Mauritania, it was about 150-300 km south of the climatological normal position for this time of year, reaching Magta Lahjar during the first decade but then descending to Kiffa and Oualata in the second decade. In Mali and Niger, the ITCZ was some 100-150 km north of the mean, reaching Tessalit and Arlit, while in Chad it was about average for this time of year, reaching Kalait. Consequently, light to moderate rains fell in southern and southeast Mauritania, in the Adrar des Iforas of northern Mali and extending to Bir Bou Mokhtar and Tin Zaouatene in southern Algeria, on the Tamesna Plains in Mali and Niger, in central pasture areas of Niger, and in central and eastern Chad as far north as Beurkia and Fada. Annual vegetation was becoming green at mid-month in parts of southern Mauritania (northwest and northeast of Kiffa, west of Tintane, and between Aioun El Atrous and Nema), central Niger (Tanout to Tasker), and central and eastern Chad. In southern Algeria, moderate rain fell in parts of the Hoggar Mountains while light rains fell near Tamanrasset and In Guezzam.

In the **Central Region**, the Inter-Tropical Convergence Zone (ITCZ) continued to move northwards over the interior of Sudan during July, reaching central areas of North Kordofan and nearly Khartoum at mid-month. Nevertheless, its position remained some 150 km south of the climatological normal mean for this time of year. As a result, rainfall was limited to areas near Sodiri and Kassala, extending to the western lowlands in Eritrea but improved in North Kordofan during the last decade of the month, reaching Abu Uruq. Light rain fell in the mountains bordering the Red Sea in Yemen and in the Jabal Akdar in northern Oman. Annual vegetation was becoming green in North Darfur near Jabal Maydub,

in North Kordofan between En Nahud and Umm Badr, and along Khor Baraka in western Eritrea.

In the **Eastern Region**, light moderate rains fell in parts of the summer breeding areas along both sides of the Indo-Pakistan border during the first two decades of July, followed by heavy showers in the last decade throughout all summer breeding areas. With the early onset of the rains this year and more than double the normal amount of rain already received so far, there is a possibility for two generations of breeding to occur this summer in west Rajasthan. By mid-July, natural vegetation started to become green in mid-July between Jodhpur and Phalodi, and near Bikaner. In southeast Iran, light rain fell in parts of the interior.



Area Treated

No control operations were reported during July.



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

Scattered adults are likely to appear in the south and southeast where small-scale breeding will cause locust numbers to increase slightly.

Mali

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

Isolated adults are likely to be present in parts of the Adrar des Iforas, Tamesna and Timetrine where small-scale breeding will cause locust numbers to increase slightly.

Niger

• SITUATION

During July, three individual solitarious adults were seen in the southeast Air Mountains near Barghot (1712N/0908E).

- **FORECAST**

Scattered adults are expected to appear in southern Tamesna and in central areas between Tahoua and Tanout, and breed on a small scale in areas of recent rainfall.

Chad

- **SITUATION**

No surveys were carried out and no locusts were reported during July.

- **FORECAST**

Scattered adults are likely to appear in central and northeast areas, and breed on a small scale as seasonal rains commence.

Senegal

- **SITUATION**

No reports were received during July.

- **FORECAST**

No significant developments are likely.

Benin, Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Nigeria, Sierra Leone and Togo

- **FORECAST**

No significant developments are likely.

Algeria

- **SITUATION**

No locusts were seen during surveys carried out in the central Sahara near Adrar (2753N/0017W) in July.

- **FORECAST**

Scattered adults may be present and are likely to persist near irrigated areas of the central Sahara in the Adrar area. No significant developments are likely.

Morocco

- **SITUATION**

No surveys were carried out and no locusts were reported during July.

- **FORECAST**

No significant developments are likely.

Libya

- **SITUATION**

No surveys were carried out and no locusts were reported during July.

- **FORECAST**

No significant developments are likely.

Tunisia

- **SITUATION**

No surveys were carried out and no locusts were reported during July.

- **FORECAST**

No significant developments are likely.

CENTRAL REGION

Sudan

- **SITUATION**

During July, scattered immature and mature solitary adults were present near cropping areas along the Nile River near Dongola (1910N/3027E), Ed Debba (1803N/73057E), and Ed Damer (1734N/3358E), and northwest of Khartoum (1533N/3235E) in Wadi Muqqadam. No locusts were seen in the Baiyuda Desert, between Khartoum and Shendi (1641N/3322E), and in North Kordofan near Umm Saiyala (1426N/3112E).

- **FORECAST**

Small-scale breeding will cause locust numbers to increase between North Darfur and Kassala as well as in cropping areas along the Nile and Atbara rivers.

Eritrea

- **SITUATION**

No locusts were seen during surveys in mid-July in the southern and central portions of the western lowlands between Golj (1444N/3643E) and Akurdet (1532N/3753E).

- **FORECAST**

Scattered adults are likely to appear in the western lowlands where small-scale breeding will occur in areas of recent rainfall.

Ethiopia

- **SITUATION**

No surveys were carried out and no locusts were reported during June and July.

- **FORECAST**

No significant developments are likely.

Djibouti

- **SITUATION**

No reports were received during July.

- **FORECAST**

No significant developments are likely.

Somalia

- **SITUATION**

No surveys were carried out and no locusts were reported during July.

- **FORECAST**

No significant developments are likely.



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Egypt

- SITUATION

No locusts were seen in the Lake Nasser area during July.

- FORECAST

No significant developments are likely.

Saudi Arabia

- SITUATION

No surveys were carried out and no locusts were reported during July.

- FORECAST

No significant developments are likely.

Yemen

- SITUATION

No reports were received during July.

- FORECAST

Isolated adults may be present in areas of recent rainfall on the Red Sea coast.

Oman

- SITUATION

No locusts were seen during surveys in the southern portion of Sharqiya region in the northeastern interior in late July.

- FORECAST

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Lebanon, Palestine, Qatar, Syria, Tanzania, Turkey, UAE and Uganda

- FORECAST

No significant developments are likely.

EASTERN REGION

Iran

- SITUATION

No locusts were seen on the southeast coast near Jask (2540N/5746E) during July.

- FORECAST

No significant developments are likely.

Pakistan

- SITUATION

No surveys were carried out and no locusts were reported during July.

- FORECAST

Small-scale breeding will cause locust numbers to increase in Tharparkar, Khipro and Cholistan.

India

- SITUATION

No locusts were seen during surveys carried out in Rajasthan and Gujarat during July.

- FORECAST

Small-scale breeding will cause locust numbers to increase in Rajasthan and Gujarat.

Afghanistan

- SITUATION

No reports received.

- FORECAST

No significant developments are likely.



Announcements

Desert Locust warning levels. A colour-coded scheme indicates the seriousness of the current Desert Locust situation: green for *calm*, yellow for *caution*, orange for *threat* and red for *danger*. The scheme is applied to the Locust Watch web page and to the monthly bulletin's header. The levels indicate the perceived risk or threat of current Desert Locust infestations to crops and appropriate actions are suggested for each level.

Locust reporting. During calm (green) periods, countries should report at least once/month and send RAMSES data with a brief interpretation. During caution (yellow), threat (orange) and danger (red) periods, often associated with locust outbreaks, upsurges and plagues, RAMSES output files with a brief interpretation should be sent at least twice/week within 48 hours of the latest survey. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. All information should be sent by e-mail to the FAO/ECLO Desert Locust Information Service (eclo@fao.org). Information received by the end of the month will be included in the FAO Desert Locust 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.

Locust tools and resources. FAO has developed a number of tools that National locust information officers and other interested individuals can use for Desert Locust early warning and management:

- **MODIS.** Vegetation imagery every 16 days (http://irdl.ldeo.columbia.edu/maproom/.Food_Security/).

- Locusts/.Regional/.MODIS/index.html)
- **MODIS.** Daily rainfall imagery in real time (http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/index.html)
 - **RFE.** Rainfall estimates every day, decade and month (http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/index.html)
 - **Greenness maps.** Dynamic maps of green vegetation evolution every decade (http://iridl.ldeo.columbia.edu/maproom/Food_Security/Locusts/Regional/greenness.html)
 - **eLocust3 training videos.** A set of 15 introductory training videos are available on YouTube: <https://www.youtube.com/playlist?list=PLf7Fc-oGpFHEdv1jAPaF02TCfpcnYoFQT>
 - **RAMSESV4 training videos.** A set of basic training videos are available on YouTube: <https://www.youtube.com/playlist?list=PLf7Fc-oGpFHGyzXqE22j8-mPDhhGNq5So>
 - **RAMSESV4 and eLocust3 updates.** Updates can be downloaded from <https://sites.google.com/site/rv4elocust3updates/home>
 - **FAOLOCAST Twitter.** The very latest updates are posted on Twitter (<http://www.twitter.com/faolocust>)
 - **FAOLocust Facebook.** A social means of information exchange using Facebook (<http://www.facebook.com/faolocust>)
 - **Slideshare.** Locust presentations and photos available for viewing and download (<http://www.slideshare.net/faolocust>)
 - **eLERT.** A dynamic and interactive online database of resources for locust emergencies (<http://sites.google.com/site/elertsite>)

New information on Locust Watch. Recent additions to the web site (www.fao.org/ag/locusts) are:

- **Desert Locust situation updates.** Archives
- **Desert Locust outbreaks in 2013-2014.** Archives – Outbreaks
- **Drones.** Activities – DLIS
- **eLocust3.** Activities – DLIS
- **RAMSESV4.** Activities – DLIS
- **DLIO-WR workshop final report.** Publications – Reports
- **CLCPRO 10th Executive Committee meeting final report.** Publications – Reports

Training videos. See the new links above for the eLocust3 and RAMSESV4 training videos on YouTube.

2015 events. The following activities are scheduled or planned:

- **Pesticide Referee Group.** Stakeholder Workshop on the Procurement and Supply

of Pesticide for Locust Control, Rome (2-3 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



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WINTER RAINS AND BREEDING

- October - January/February

SPRING RAINS AND BREEDING

- February - June/July

RECESSION

- period without widespread and heavy infestations by swarms.

REMISSION

- period of deep recession marked by the complete absence of gregarious populations.

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.

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.

WARNING LEVELS

GREEN

- Calm. No threat to crops. Maintain regular surveys and monitoring.

YELLOW

- Caution. Potential threat to crops. Increased vigilance is required; control operations may be needed.

ORANGE

- Threat. Threat to crops. Survey and control operations must be undertaken.

RED

- Danger. Significant threat to crops. Intensive survey and control operations must be undertaken.

REGIONS

WESTERN

- locust-affected countries in West and North-West Africa: Algeria, Chad, Libya, Mali, Mauritania, Morocco, Niger, Senegal, Tunisia; during plagues only: Burkino Faso, Cape Verde, Gambia, Guinea and Guinea-Bissau.

CENTRAL

- locust-affected countries along the Red Sea: Djibouti, Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Somalia, Sudan, Yemen; during plagues only: Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria, Tanzania, Turkey, UAE and Uganda.

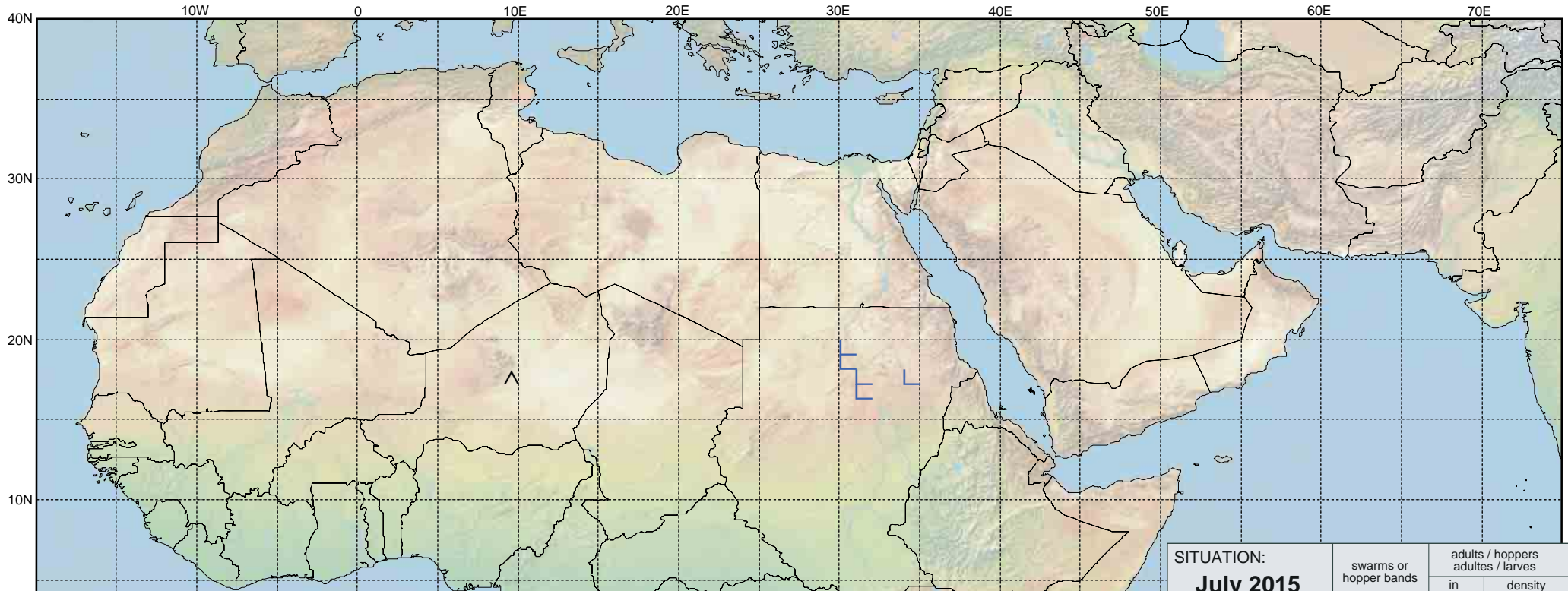
EASTERN

- locust-affected countries in South-West Asia: Afghanistan, India, Iran and Pakistan.



Desert Locust Summary

Criquet pèlerin - Situation résumée



FORECAST TO: PREVISION AU:	15.09.15	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: July 2015 juillet 2015	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)			