

SITREP.10.03 □**SITUATION REPORT ON EMERGENCY
TRANSBOUNDARY OUTBREAK PESTS
(ETOPS) FOR OCTOBER WITH A
FORECAST TILL MID-DECEMBER 2003****SUMMARY**

1. **Summary:** This report provides an update on the situation of emergency transboundary outbreak pests (ETOPs) in Africa, the Middle-East, Central and Southwest Asia, and Latin America in October with a forecast till mid-December 2003. Key ETOPs, including locusts, grasshoppers, armyworm and grain-eating *Quelea* birds are covered by the report. A brief overview of the current status of each of these pests is outlined in the remainder of this summary and detailed accounts with a six-week forecast are provided thereafter.

**DESERT LOCUST, *SCHISTOCERCA
GREGARIA* (FORSKAL)**

2. The desert locust, *Schistocerca gregaria* (Forsk.), situation further developed in northwestern Mauritania, northern Mali, northern Niger, and southern Morocco in October. The rains that fell in northern Mauritania and southwestern Morocco during the reporting month exacerbated the situation. Locust populations composed of solitary mature adults and transient as well as hoppers were treated on over 2,850 ha in Mali, Mauritania, and Niger in October and on more than 1,670 ha in Morocco in early November. It is likely that breeding will continue in northern Mauritania and southern Morocco in areas where rainfall occurred during the month. Adult locusts will begin moving north

and northwest out of Mali and Niger into northeastern Mauritania, southern and southwestern Algeria as well as southern Libya where numbers will increase during the forecast period. Given the vastness and remoteness of the breeding areas, it is important that regular survey and monitoring are carried out and timely control operations are implemented to mitigate any unexpected locust upsurges.

3. Locust swarms were controlled on some 4,900 ha in northeastern Sudan in October. Adult locusts were seen in the Western Desert region and near Lake Nassir, Egypt (FAO DLB). The DLCO-EA sprayed treated mixed populations of desert locusts and grasshoppers on 1,500 ha in Naro plains, Eritrea in early October. Locust numbers will likely increase on the Red Sea coastal plains in northeastern Sudan, but possibly decline in Kordofan and Darfur. Small swarms could form in Sudan and migrate to the Red Sea coasts of Saudi Arabia where they could begin breeding once the winter rains start falling. Small scale breeding could also occur on the coastal plains in Eritrea if favorable conditions occur during the forecast period. A similar situation could also occur in Yemen, but significant activities are not likely in the region during the forecast period.

4. A few isolated adult locusts were sighted in the summer breeding areas in Pakistan and a similar situation might have occurred in Rajasthan, India in October. Significant activities are not likely during the forecast period.

**OTHER LOCUSTS AND
GRASSHOPPERS.**

5. **Red locusts, *Nomadacris septemfasciata* (Surville):** Isolated scattered adult locusts

were seen in Kafue Flats, Zambia in late October, but a calm situation persisted in other outbreak areas. A late received report indicated that a fungi-based biopesticide, Green Muscle, was tried on some 2,600 ha in Iku and Wembere outbreak plains, Tanzania in August-September and the results of the trial are being awaited. Limited-scale breeding could occur in Iku-Katavi, Wembere and Malagarasi areas, Tanzania, Buzi-Gorongosa, Mozambique, Lake Chilwa plains, Malawi, and Kafue Flats, Zambia, but significant activities are not expected during the forecast period. Routine survey and monitoring are encouraged to avoid any unpredicted invasions.

6. **Madagascar migratory locust, *Locusta migratoria capito* (L.)**. No reports were received on the Madagascar migratory locust or red locust in October. It is likely that ecological conditions will begin improving in the traditional outbreak areas where some locust activities could begin appearing with the onset of the rains in the outbreak areas during the forecast period.

7. The ***Oedaleus senegalensis* (Krauss)** (OES), the Senegalese grasshopper and ***Zonocerus variegatus* (L)**, variegated grasshopper, season has come to an end and no further activities were reported in October. ***Anacridium melanorhodon* (Walker)**, tree locust infestations and grasshopper outbreaks were controlled on some 2,960 ha and 1,650 ha in Nyala and El-Fashir, Sudan, respectively. No further reports were received on other locusts, including brown locust, ***Locustana pardalina* (Walker)** in October.

8. Italian locust, ***Calliptamus italicus* (L)**, Moroccan locust, ***Dociostaurus maroccanus*** or migratory locust, ***Locusta migratoria migratoria*** activities in Central Asia have

ended. The eggs that were laid earlier will continue to remain dormant until next spring.

9. **Armyworm, *Spodoptera exempta* (Walker)**. Armyworm activities remained calm in October in the traditional outbreak areas. Limited activities may be seen in Malawi, Mozambique, Zambia and Zimbabwe in the coming few months. Active monitoring is essential. Other countries will likely remain free of armyworm during the forecast period.

10. **Red-billed quelea, *Quelea quelea* (L.)**. Quelea roosts were controlled on some 610 ha in Ethiopia in eastern part of the country and the central rift valley regions in October with the help of DLCO-EA aircraft. Crops threatened were sorghum and maize. Quelea control operations were also carried out in various places in eastern Sudan where more than 21,500 ha were treated with over 37,300 liters of pesticides with the help of DLCO-EA spray aircraft. No reports were received on quelea from the other outbreak countries. It is likely that quelea will continue posing a threat to crops in the outbreak areas. Regular survey and monitoring are essential to avert any serious bird damage. End of Summary.

ENVIRONMENTAL SITUATION: WEATHER AND ECOLOGICAL CONDITIONS

11. In October, the Inter-Tropical Convergence Zone (ITCZ), one of the major determining factors for the Sahelian locust ecology, moved south of 15°N and much of the summer breeding areas in Sahelian West Africa remained fairly dry, except the heavy rain that fell in the Atlantic coastal areas stretching from Senegal to southern Morocco and into western Algeria during the third decade of October. In general, vegetation was

drying up in most of these places with the exception of wadis and law laying grounds.

12. Rain has declined in the central region outbreak areas in Sudan, Eritrea, Egypt, Saudi Arabia and Yemen except the light rains that fell in the western lowlands of Eritrea, northeastern Sudan and a few places along the Red Sea coastal plains of Yemen. Dry conditions prevailed on the coastal areas of Djibouti, Somalia, and the other outbreak areas in the region.

13. Monsoon rains have ended in the Eastern outbreak region where vegetation continued to dry up. Unfavorable hot and dry conditions persisted during the reporting month.

14. Moderate rainfall was recorded in eastern Zimbabwe and light rain fell in Tanzania, Malawi, western Zimbabwe, Botswana, Namibia, and South Africa during the third dekad of October. Meteorological data was not available for Zambia and Madagascar at the time this report was compiled.

DESERT LOCUST ACTIVITIES

15. **Western and Northwestern Africa Outbreak Region:** The desert locust, *Schistocerca gregaria* (Forsk.) situation has further developed in northwestern Mauritania, northern Mali, northern Niger and southern Morocco. The situation was exacerbated by the rains that fell in northern Mauritania and southern Morocco during the reporting months. Locust numbers have been on the increase and control operations were carried on a total of 4,000 ha in all of these countries during the report month and early November. Most of the mature adult locusts were either solitary or transient. The drying up of vegetation in most of the breeding areas has forced the locusts to concentrate in a few areas

where vegetation was still green. A few adults have moved into southern Morocco and northwestern Mauritania where they could possibly breed during the forecast period. Some congregated mature and immature adults and hopper bands persisted in a few locations in these countries and Chad where favorable conditions prevailed throughout the month.

16. Forecast: Locust numbers will slightly increase and concentrate in areas of green vegetation in western Africa. It is likely that small swarms could be formed during the forecast period in northern Mali, northwestern Mauritania and locusts will begin moving into southern Algeria, northwestern Mauritania, and southern Libya. Considering the vast and remote breeding and outbreak areas, it is important that regular survey and monitoring are carried out to mitigate any unpredicted locust upsurges.

17. **Eastern Africa, Northeastern Africa, and the Near East Outbreak Region:** Locust swarms developed in northeastern Sudan between the Nile River and the Red Sea hills in October where breeding continued. Control operations were carried out on close to 4,900 ha. Adult locusts were seen in the Western Desert region and near Lake Nassir, Egypt (FAO DLB). Desert locusts mixed with grasshoppers were controlled on some 1,500 ha in Naro plains, Eritrea in early October by ground means with the help of the DLCO-EA.

18. Forecast: Locust numbers will likely increase on the Red Sea coastal plains in northeastern Sudan, but possibly decline in Kordofan and Darfur. Small swarms could form in eastern Sudan and migrate to the Red Sea coasts of Saudi Arabia where they could begin breeding once the winter rains start falling. A similar situation could also occur in Yemen, but significant populations are not

likely. Small scale breeding could also occur on the coastal plains in Eritrea if the winter rains fall during the forecast period. Other countries in the region will likely remain relatively calm during the forecast period.

19. Eastern Outbreak Region: A few isolated adult locusts persisted in the summer breeding areas in the eastern outbreak region in Pakistan and a similar situation might have occurred in Rajasthan, India in October.

20. Forecast: Locust numbers are expected to decline as the vegetation continues to dry up with the end of the Monsoon rains. Significant activities are not expected during the forecast period.

OTHER LOCUST AND GRASSHOPPER ACTIVITIES

21. The *Oedaleus senegalensis* (Krauss) (OES), the Senegalese grasshopper and *Zonocerus variegatus* (L), variegated grasshopper season has ended and no further activities were reported in October from the outbreak countries in Sahelian West Africa. DLCO-EA spray aircraft controlled infestations of tree locusts, *Anacridium melanorhodon* (Walker) on some 2,960 ha in Nyala, southern Darfur region, Sudan. DLCO-EA also sprayed grasshopper outbreaks on some 1,650 ha in El-Fashir, Sudan. Further reports were not received on other locusts, including brown locust, *Locustana pardalina* (Walker) during the reporting month.

22. □ No reports were received on the Italian locust, *Calliptamus italicus* (L), Moroccan locust, *Dociostaurus maroccanus* or migratory locust, *Locusta migratoria migratoria* in Central Asia – Afghanistan, Uzbekistan, Kazakhstan or other countries in October.

Note: Inadequate technical resources and infrastructure will continue to impede the capacity of the Afghan national crop protection unit to conduct regular survey and monitoring as well as organize and launch control operations without external support. Thus, locust control in this country will continue to rely largely on external assistance for some time.

23. Forecast: No further locust activities are expected during the forecast period. The eggs that were laid earlier will remain dormant until next spring when they hatch and give rise to hoppers.

24 Latin America and the Caribbean (LAC). No reports were received on locusts or grasshoppers in LAC countries in October.

25. Forecast. Due to lack of sufficient information, a substantive forecast was not possible during the reporting month, however, some insignificant ETOP activities may appear here and there in the coming months.

26. Red locust, *N. septemfasciata* (Surville): Isolated scattered adult locusts were seen in Kafue Flats, Zambia during surveys carried out in late October and no further activities were reported during this month. A late received report indicated that a fungi-based biopesticide, Green Muscle (GM^R), was tried on some 2,600 ha in Iku and Wembere outbreak plains, Tanzania in August and September. The results of the trial are being awaited.

27. Forecast: Limited breeding could be seen in Iku-Katavi, Wembere and Malagarasi areas, Tanzania, Buzi-Gorongosa, Mozambique, Lake Chilwa plains, Malawi, and Kafue Flats, Zambia during the forecast period. Other countries in the regional will likely remain

fairly calm. Routine survey and monitoring are encouraged to avoid any unpredicted invasions.

28. **Madagascar migratory locust, *L. migratoria capito* (L.)**. No reports were received on the Madagascar migratory locust or red locust in October. It is likely that ecological conditions will be improving in the traditional outbreak areas where some locust activities could begin appearing with the onset of the rains during the forecast period.

29. **Brown locust, *L. pardalina* (Walker)**: No reports were received on brown locusts in October from the traditional outbreak areas. No major precipitation was recorded during the reporting month or earlier and it is likely that significant developments will not occur during the forecast period.

ARMYWORM ACTIVITIES

30. **Armyworm, *S. exempta* (Walker)**. Armyworm activities remained calm in October.

31. Forecast: Armyworm activities may be seen in Malawi, Mozambique, Zambia and Zimbabwe in the coming few months. Other countries will likely remain free of armyworm during the forecast period. Active look out is essential and armyworm trap operators should be encouraged to submit their weekly moth catches to their respective national forecasting officers.

QUELEA BIRD ACTIVITIES

32. **Red-billed quelea, *Quelea quelea* (L.)**. Quelea roosts were controlled on some 610 ha in Ethiopia in eastern part of the country and the central rift valley regions in October with

the help of DLCO-EA aircraft. Crops threatened were sorghum and maize. Quelea control operations were also carried out in various places in eastern Sudan where more than 21,500 ha were treated with over 37,300 liters of pesticides with the help of DLCO-EA spray aircraft. No reports were received on quelea from the other outbreak countries. It is likely that quelea will continue posing a threat to crops in the outbreak areas. Regular survey and monitoring are essential to avert any serious bird damage.

33. Forecast: Quelea birds are likely to continue being a problem to small grains in the traditional outbreak areas, including, Ethiopia, Kenya, and Tanzania. These birds are likely to commence breeding in January in the IRLCO-CSA countries, including Mozambique, Tanzania and Zimbabwe and perhaps cause damage to small grain cereals in these countries later in year. Regular survey and monitoring are essential to avert any serious bird damage during the forecast period.

RECOMMENDATIONS

34. Favorable ecological conditions gave rise to a slight increase in the desert locust populations in Mali, Mauritania, Morocco, Niger and Sudan and required control intervention. Quelea birds and grasshoppers invoked control actions on a limited scale. If left unaddressed, such infestations could increase and cause serious damage to crops and pasture. Although, ecological conditions are expected to change, it is evident that a shift in the externalities of the ETOP ecosystem, such as end of the current drought and/or the dry spell could trigger massive pest invasions, which will significantly offset the already precarious food security situation in most of the countries that live under a constant threat from ETOP outbreaks. **Hence, regular**

survey, monitoring, reporting and early preventive control interventions are highly recommended to avert any unexpected pest-related disaster.

AELGA will continue monitoring the ETOP situation in close collaboration with its partners, including the UN/FAO MPU, DLCO-EA, IRLCO-CSA, EMPRES Regional Programs, host-country counterparts and others and provide regular updates.

ACTION REQUESTED AND CONTACT INFORMATION

35. The Assistance for Emergency Locust/Grasshopper Abatement, formerly known as the Africa Emergency Locust/Grasshopper Assistance (AELGA) project, is managed by USAID, Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), Office for U.S. Foreign Disaster Assistance (OFDA). AELGA works closely and/or interacts with the UN/FAO, other international organizations, USAID bilateral and regional missions, DLCO-EA, IRLOC-CSA, host country ministries, and research establishments, and Southern Africa Development Community Drought Monitoring Center (SADC/DMC). Information on ETOPs is regularly collected from these and other sources, including the Information Core for Southern Africa Migratory Pests (ICOSAMP), to continuously monitor and analyze the potential risks of large-scale emergency outbreaks, and compile and disseminates it to interested parties worldwide as a SITREP. **Unsolicited reports or information on ETOP situations and activities in your region or country are always warmly welcome and much appreciated.**

36. USAID field Missions with programs and portfolios on food security, agriculture, environment, conflict and related activities are solicited to encourage their host country counterparts to send us updates on ETOP activities as often as possible. FEWS field personnel are also solicited to send us any information they may obtain on ETOP activities in their countries and/or regions of responsibility. Regional organizations with mandates for ETOPS and host country partners are kindly requested to forward their reports by the last day of the reporting month or within the first three days of the forecasting months. **Please, forward reports, information, questions, and/or requests to Dr. Yene T. Belayneh: ybelayneh@ofda.net FAX: 202-347-0315 (USA).**

USEFUL LINKS

For more information on the weather conditions, you may visit the following web sites:

<http://www.fews.net/http://www.fao.org/WAI/CENT/faoinfo/economic/giews/economic/english/esahel/sehtoc.htm>

<http://www.fews.net>

For more information on ETOP activities, you may visit:

<http://www.fao.org/news/global/locusts/locuholm.htm/>

<http://www.english/newsroom/news/2002/5000-en.htm/>

<http://www.web.agr.ac.uk/directory/NRI/pcs/>

<http://www-web.gre.ac.uk/directory/NRI/quel/>

<http://icosamp.ecoport.org/>

<http://www.dmc.co.zm>

**TO LEARN MORE ABOUT AELGA'S
ACTIVITIES, VISIT US AT OUR WEB
SITE: WWW.AELGA.NET**

**P.S.: Our webpage is temporarily out of
commission. We sincerely apologize for any
inconvenience this might have caused**

37. □ UPCOMING □ EVENT □

Interregional Trainer Training Course on
Alternative Application Strategies and Tactics
(AAST) for acridid control. **Those interested
can contact Dr. Yene T. Belayneh, at
ybelayneh@ofda.net or phone: 202-661-
9374 and FAX: 202-347-0315 (USA)**

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