



LOCUST BULLETIN No. 25



FAO - Plant Production and Protection Division (AGPM)

15 September 2013

Situation level: CALM

General Situation during August 2013 Forecast until mid-October 2013

The locust situation was generally calm in Caucasian and Central Asian (CCA) countries as a result of the intense and large-scale control operations previously carried out mainly up until the end of July and of the progressive disappearance of the remaining locust populations.

Caucasus. Locust adult populations progressively disappeared in **Azerbaijan** and **Georgia**, while CIT hopper development was still in progress in **Armenia**, where limited treatments were carried out on 1,000 ha.

Central Asia. The locust control campaign came to an end in July in most of the Central Asian countries, where the remaining adult locust populations were progressively disappearing. In August, control operations were undertaken on 110,950 ha in Russia and egg-laying surveys were carried out in two countries: **Kyrgyzstan, Russia** and **Tajikistan**.

Weather and Ecological Conditions in August 2013

Warm weather still prevailed in Caucasus and Central Asia except in Armenia and Russia where heavy rains fell.

In **Caucasus**, heavy rains fell in Armenia while hot weather prevailed in Azerbaijan. Natural vegetation started drying out in Armenia and was dry in Azerbaijan.

In Armenia, rains fell and thunderstorms occurred with occasional hail (up to 15 mm in diameter). The average temperature was below normal by 1/3°C. Temperatures ranged from 16/21°C to 32/36°C in the lowlands, from 12/15°C to 27/31°C at foothills and from 7/12°C to 24/29°C in mountainous areas, which represented a decrease in temperatures and amplitude of 1°C and 7°C respectively compared to the previous month. Relative humidity was of 60-80% at the foothills and in mountainous areas while it did not exceed 60% in the lowlands. Agricultural work continued during the month with massive harvest of grain, fruit and vegetable. The natural vegetation was mostly green in all regions but started drying out, and had a medium cover in low- and highlands.

In Azerbaijan, the weather was dry and very hot in August with temperatures of 36/38°C reaching up to 42/45°C, representing another slight increase compared with the previous month. Natural vegetation was dry, with a low cover. Harvest had almost been completed.

In **Central Asia**, hot weather continued to prevail in Kyrgyzstan, Tajikistan and Uzbekistan while it was warm and rainy in the Russian Federation.



In Kyrgyzstan, the weather was still warm but temperatures decreased by at least 4°C compared to July. In the northern regions, the temperature was of 19/21°C, ranging from 11/15°C to 22/26°C during the 1st half of the month and from 13/18° to 24/26°C during the 2nd half. The monthly rainfall (10/31 mm) was below normal for the second consecutive month. In the southern regions, the average monthly temperature was of 22/27°C, ranging from 12/18°C to 24/27°C during the 1st half of the month and from 14/19° to 26/28°C during the 2nd half. The rainfall was normal. Relative humidity was of 52/59%. Maximum soil temperature ranged from 59 to 68°C at the surface and from 18 to 25°C at a depth of 10 cm. The maximum wind speed was of 10.3 m/s. The vegetation was dry with a height of 1-4 cm and a medium cover.

In the Russian Federation, the weather was warm and rainy. In the southern areas of the Central Federal District (FD), the weather was moderately warm (average of 16/26°C) with some rain and humidity ranged from 65 to 75%. In North Caucasus and Southern FDs, the weather was very variable but rainy with average daily temperature ranging from 26 to 32°C. The relative humidity ranged from 58 to 63%. In the Volga FD, the weather was unstable and rainy. The average temperatures were of 24/36°C during the day and of 16/25°C at night. Torrential rains fell almost daily and thunderstorms occurred with occasional hail. The relative humidity ranged from 51 to 81%. In the Siberian FD, the weather was warm and rainy, with thunderstorms, hail and fog. The average temperature was of 19.9°C.

In Tajikistan, very hot weather prevailed with higher temperatures than usual by 2-4°C.

In Uzbekistan, the weather was still hot with average temperatures of 32/38°C during the day and of 20/25°C at night, representing a decrease of more than 8°C as compared to July. The natural vegetation was dry.

Area Treated in August 2013

Armenia	1,000 ha
Russia	110,950 ha

Locust Situation and Forecast

(see also the summary on page 1 and maps on last page)

CAUCASUS

Armenia

• SITUATION

In August, the locust situation was calm throughout the country. During surveys carried out on 45,000 ha, only a patchy distribution of scattered CIT hoppers was observed on an area of 36,000 ha, at a density generally not exceeding the economical threshold. Therefore, control operations against State budget were not required. Households carried out some limited treatments in fruit, vegetable and melon crops using synthetic pyrethroids on a total area of 1,000 ha in Aragatsotn, Ararat, Armavir, Kotayk and Shirak provinces.

• FORECAST

No mass distribution or large populations of CIT is expected. Hopper development will come to an end, fledging will occur, adults will mate, lay eggs and progressively disappear due to natural mortality..

Azerbaijan

• SITUATION

In August, DMA egg-laying was completed, the life cycle came to an end and the adults disappeared progressively. No control operations were carried out against DMA adult populations. As at 1st September, the total treated are was of 57,900 ha.

• **FORECAST**

No further locust activity is expected. Autumn survey of egg-beds will start in September.

Georgia

• **SITUATION**

No survey or control operations were carried out in August. In total, 22,435 ha were treated during the 2013 locust campaign as per updated information, of which 6,810 ha by air.

• **FORECAST**

No further development is expected this year.

CENTRAL ASIA

Afghanistan

• **SITUATION**

In August, due to insecurity and lack of funding, no egg-bed surveys were carried out. However, an assessment of the 2013 locust campaign was done to learn lessons and improve the next campaign, during which it is expected that 135,000 ha will be infested.

• **FORECAST**

No further development is expected this year.

Kazakhstan

• **SITUATION**

No bulletin was received for August.

• **FORECAST**

The remaining locust populations will eventually disappear during the forecast period.

Kyrgyzstan

• **SITUATION**

In August, mating and egg-laying surveys were carried out on a total area of 8,400 ha, of which 5,398 ha (64%) were infested at a density of 1-4 adults/m². During the campaign, which started on 17 April and ended on 23 July, a total of 53,741 ha were treated. Prior to the control operations, farmers, beekeepers, and local communities and authorities were informed. During treatments, operators wore



personal protective equipment.

• **FORECAST**

The remaining locust populations will eventually disappear during the forecast period.

Russian Federation

• **SITUATION**

In August, all locust species were at the adult stage, continued laying eggs and started disappearing. Egg-bed surveys started to assess their importance and the number of egg-pods. A total of 110,950 ha were treated during the month, mainly in Siberian Federal District (FD).

As a whole during the 2013 locust campaign, a total of 1,332,500 ha were treated, of which more than 61% in the Volga FD. This campaign also provided the opportunity to strengthen bilateral cooperation with Kazakhstan by establishing regular exchange of information and conducting joint and cross-border surveys, in particular between the Altai territory and East-Kazakhstan.

• **FORECAST**

The remaining locust populations will eventually disappear during the forecast period.

Tajikistan

• **SITUATION**

In August, surveys of egg-laying sites were carried out on a total 102,000 ha, of which 54,000 ha in Khatlon, 25,000 ha in Sughd, 20,000 ha in RRS, and 3,000 ha in Badakhshan. Egg-laying was observed in wet and shaded areas, probably as a result of the prevailing hot weather. The results of the campaign were shared with the media.

• **FORECAST**

Egg-bed survey will take place during the forecast period.

Turkmenistan

• SITUATION

No bulletin was received for August.

• FORECAST

No development is expected.

Uzbekistan

• SITUATION

No control or survey operations were carried out in August.

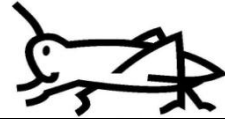
• FORECAST

No further locust development is expected.

Announcements

Locust warning levels. A colour-coded scheme indicates the seriousness of the current situation for each of the three main locust pests: green for *calm*, yellow for *caution*, orange for *threat* and red for *danger*. The scheme is applied to the Locust Watch web page dedicated to the current locust situation ("Locust situation now!") and to the regional monthly bulletin header. The levels indicate the perceived risk or threat of current 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 standardized information using the national monthly bulletin template. During caution (yellow), threat (orange) and danger (red) periods, often associated with locust outbreaks and upsurges, updates should be sent at least once/week. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. All information should be sent by e-mail to Annie.Monard@fao.org. Monthly information received by the 5th of each month will be included in the CCA Locust Bulletin to be issued by mid-month; otherwise, it will not appear until the next bulletin. Reports should be sent even if no locusts were found or if no surveys were conducted.



August 2013 events and activities. No activities carried out.

September 2013 events and activities. The following activities are scheduled:

- **Training session on mitigating and monitoring the impact of locust control operations on human health and the environment** to be delivered to 12 plant protection/locust experts from Kazakhstan by Mr H. van der Valk, FAO Environmentalist, on 9-13 September 2013, in Aktobe, **Kazakhstan**.
- Conventional pesticides to be delivered in **Kyrgyzstan** through the national FAO project (TCP/KYR/3305).
- Invitation letters to be sent out for:
 - (1) the **Locust Geographical Information System (GIS) Workshop, on 6-8 November 2013**; and
 - (2) the **Technical Workshop on Locusts in Caucasus and Central Asia, on 11-15 November 2013**, both in **Tashkent, Uzbekistan**.

[Note: deadline for sending the list of participants: 30 September 2013]

