Shiga Prefecture Agriculture is the Best Solution to Climate Change!

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Shiga and Lake Biwa

Shiga in Japan

Location of Lake Biwa
Shiga and Lake Biwa

Basic information about Lake Biwa

- **Surface area:**
  670.25 km²
  (1/6 the size of Shiga)
- **Length of shore:**
  235 km
- **Water volume:**
  ~27.5 billion m³
- **Average depth:**
  ~41 m
- **Maximum depth:**
  103.58 m
- **Minimum width:**
  1.35 km

Shiga, JAPAN
Impact of Climate Change in Shiga

Trend in the average temperature: +1.3°C in 100 years

The annual average temperature in Hikone, Shiga (1894-2018)

A further rise of about 2.9°C by the end of the century is predicted. That is the same average temperature as present-day Miyazaki.
Animal and Plant Life is Already Changing

Butterfly that lived further south

Cherry Blossoms at Lake Biwa Canal

Blue-green algae appeared later than usual, in late autumn (November 6, 2015)
Impacts on Lake Biwa

Every winter, Lake Biwa turns into a holomictic lake that has a uniform temperature and density from top to bottom. However, this year, the lake stayed meromictic because of the warm winter.
Impacts of Climate Change on Agriculture in Shiga

Deterioration in the appearance of rice due to summer heat

white immature grains

cracked rice grains
Impacts of Climate Change on Agriculture in Shiga

Destruction of vinyl greenhouses by typhoon No. 21 (September 2018)