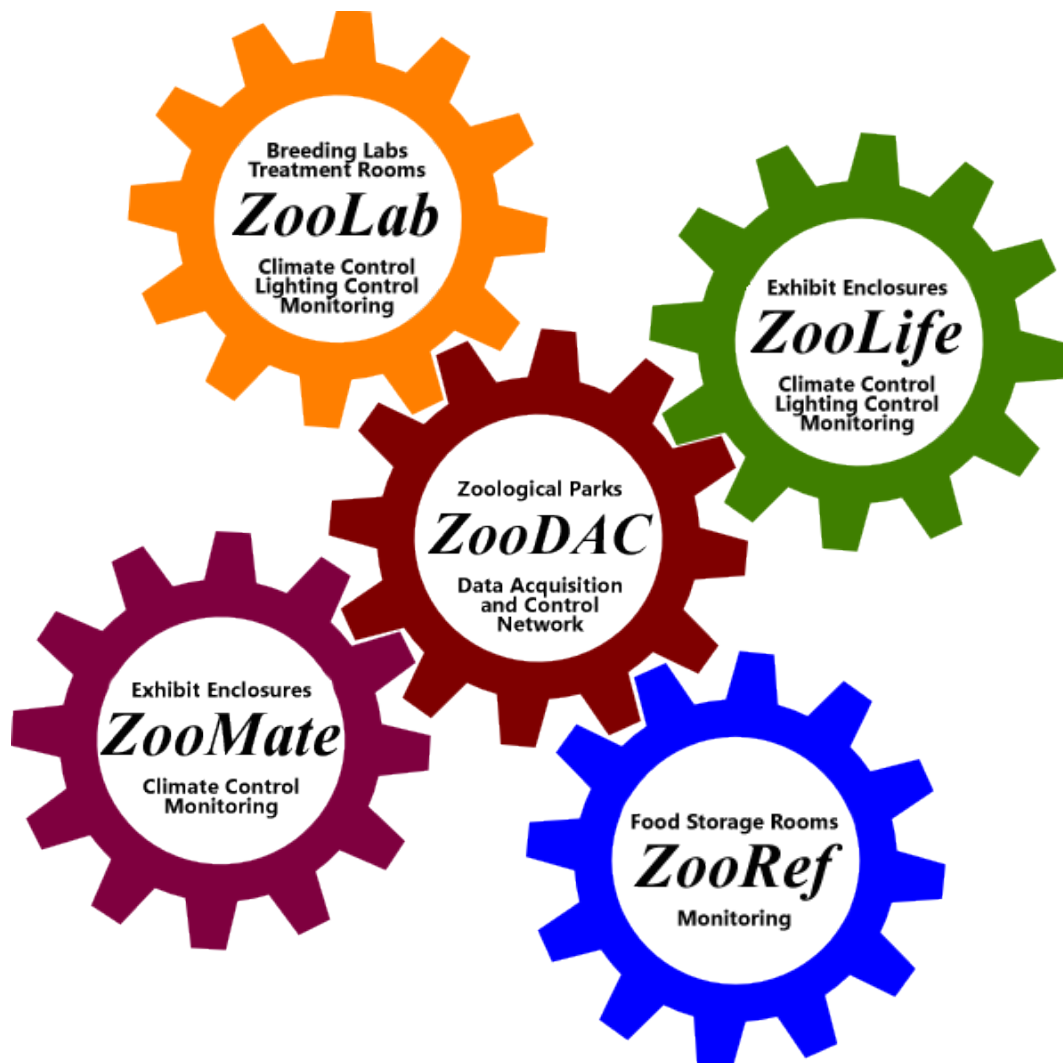# Adena ZooLog ™

Enclosure Climate Monitoring System

ZooLog is a software program and hardware system designed to monitor and record the climate and soil conditions in animal enclosures at zoological facilities.

★ Automate the collection of enclosure climate data.

★ Automatically email staff when enclosure alarms occur.

★ Record enclosure data to support research and management.

★ Enable staff to focus more on animal care and conservation tasks.

ZooLog Program Features

Data Logging

- Enclosure and external temperature and RH values logged every 10 minutes.
- Enclosure and external max, min and average temperature and RH values logged daily.
- Enclosure soil moisture content and soil temperature logged every hour. (Optional)
- Enclosure min, max and average soil moisture content and soil temperature logged daily. (Optional)
- Barometric pressure sensor with hourly logging. (Optional)
- Electricity use in kWh logged as hourly and daily totals.
- Event log of last 1000 alarm and system control events.
- Datalogging memory in excess of 1 year between downloads before memory overwrite.
- Data logged to ring memory so oldest data is overwritten first when memory full.
- Data files downloadable to Windows based PC using Campbell Scientific LoggerNet software.
- Data graphing from Windows based PC using Campbell Scientific LoggerNet software.

Alarms

- Power failure. (The electricity supply to the enclosure has failed)
- Communications failure. (The station can't obtain data from another station)
- External Sensor Failure. (For stations with external air temperature and RH sensors)
- Enclosure temperature too high.
- Enclosure temperature too low.
- Enclosure sensor failure.

General

- Battery backup of datalogger 12V power so system keeps logging data during power failure.
- Alarms sent via email to staff if power fails, or if communications to a remote station fails.
- Communications to stations via LAN enables staff to monitor system operation.
- Communications to stations via LAN enables automated or manual collection of logged data.
- System maintenance from Windows based PC using Campbell Scientific LoggerNet software.

ZooLog is a module of ZooDAC, our zoo-wide, networked, data acquisition and control system. Each module is able to operate as a standalone station or as an integral part of a fully networked site-wide system. Using our modular approach, there is no practical limit to the number of stations or the geographic spread of any given site providing that network connectivity is available for each station.

Adena Scientific believes that accuracy and reliability are paramount requirements of any system used in animal welfare roles so we purpose designed our ZooDAC system to meet zoological needs, and built it to run on dataloggers manufactured by Campbell Scientific in the USA and available worldwide.

Adena Scientific Ltd