



THERE ARE DIFFERENT TYPES OF INACTIVITY USED BY ANIMALS TO SURVIVE THE COLDER MONTHS OF THE YEAR. WE OFTEN REFER TO THESE METHODS AS HIBERNATION, BUT TECHNICALLY, HIBERNATION IS ONLY ONE WAY FOR WILDLIFE TO SURVIVE THE CHALLENGES OF WINTER.

## **WELCOME**

Through the winter months, humans often wrap up warm and spend more time indoors. Our local wildlife can't turn on the heating to keep warm, so different animals have found other ways to survive the cooler months of the year.

Some wildlife go into hibernation. This isn't sleeping; instead, they become inactive, slowing their breathing and heart rates, and lowering their body temperatures. After the winter weather has passed and things start to warm up again, animals leave their hibernation areas and continue to forage for food.

There are lots of things we can do to help wildlife during the harsher winter months of the year, and making sure food is available for them in our gardens and community spaces is a great start. Equally important is thinking about creating locations where animals can hibernate throughout the winter months.

However, as we continue to tidy our gardens and open spaces, places to hibernate are not always easy for animals to find. Making a hibernaculum is a great way to help those animals which need a place to hibernate, simply by creating a safe space for them to spend the winter months, and in some cases, use year-round.

In the same way the AELTC is making changes across our sites for nature, at home or in our community spaces, we can all act in some small way to help wildlife. Creating a hibernaculum, putting out food, or growing plants that will help our local wildlife during the winter months are all great ways to do our part in helping nature to thrive.

Andy Wayro Senior Landscape Design Manager The All England Lawn Tennis Club



## **DID YOU KNOW**

There are only three species of animals that fully hibernate in the UK: hedgehogs, dormice and bats.

## TYPES OF INACTIVITY

#### **HIBERNATION**

In hibernation, animals such as hedgehogs and bats find a protected location and then reduce their heart rates, slow their breathing, and lower their body temperatures. This allows them to conserve their energy during periods of cold weather when food is less available. They stay in these locations until warmer weather returns, then emerge and continue their regular activities.

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## **TORPOR**

This is when animals involuntarily slow down due to harsh winter conditions. It is shorter than hibernation and animals can easily enter into and emerge from these periods of torpor or dormancy. Examples of animals that do this are badgers and squirrels. They save their energy for warmer days during the winter when they forage for food, then hide away when its cooler.

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#### **BRUMATION**

Brumation is a period of inactivity used by reptiles and amphibians in colder months. It is very similar to hibernation, as these animals become very inactive for periods of time to save energy. Reptiles and amphibians are ectothermic, meaning they regulate their body temperatures by using their surrounding environments. When its colder they become less capable of hunting for good, so they so they save energy by finding a sheltered place and moving as little as possible.

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## DIAPAUSE

Diapause is slightly different to hibernation, torpor, and brumation. Alternatively, insects respond to environmental conditions by interrupting their development. Similiar to hitting the pause button on a tennis match and then returning to watch the end. For insects this can occur in all stages of their life cycle; as embryos, larvae, pupae, or adults, enabling them to match their life cycle with good weather conditions.

# A FEW THINGS YOU CAN DO LOCALLY TO HELP WILDLIFE THROUGH THE WINTER

Create places for wildlife to hide and hibernate in, such as a hibernaculum, bug hotel, compost heap or a pile of logs.

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Remember not to move or disturb areas where animals may hibernate in winter.

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Think about choosing plants, window boxes or green spaces for your garden which will attract insects or produce fruit and berries.

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Create a pond or marshy area. This will increase the number of insects such as small flies, which will help reptiles and amphibians find the extra food they need to increase body fat for the winter.

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Think about creating spaces under paving slabs or rocks for wildlife to hide under.

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Avoid using pesticides. These can be harmful to plants and insects which other wildlife feed on. Look to encourage natural predators instead.

## WHAT EQUIPMENT YOU WILL NEED

Building a hibernaculum will help amphibians and reptiles stay warm during the cold winter months.

Here is the equipment you'll need to follow our step-by-step guide overleaf.

## PLEASE NOTE

If you are using plastic drainpipes, roughen the insides with sandpaper so they are not too slippy for animals to climb.

## **EQUIPMENT**

- 1 Spade
- 2 Logs and branches
- 3 Rocks and bricks
- 4 2-3 drainpipe cut-offs or cement pipes
- 5 Turf or meadow flower seeds



## STEP-BY-STEP GUIDE TO BUILDING A HIBERNACULUM

Making a hibernaculum is easier than it may seem, however it is important to carefully follow each step to ensure your new hibernaculum is suitable for any prospective occupants.



## STEP TWO

Fill the hole with logs, branches, bricks and rocks, leaving plenty of gaps in between.



## STEP THREE

Insert entrance tubes (drainpipes) at ground level into the pile.









# SOME UK ANIMALS WHICH HIBERNATE OR BECOME INACTIVE IN WINTER







SLEEPING FROG - PEACOCK BUTTERFLY - SMOOTH NEWT







**GRASS SNAKE - COMMON TOAD - TWO-SPOT LADYBIRD** 







COMMON LIZARD - LEISLER'S BAT - COMMON GARDEN SNAIL







SMALL TORTOISESHELL BUTTERFLY - HEDGEHOG - SLOW WORM