

#### Technical sheet 4

Transnational project to preserve and develop biodiversity in Upper Rhine vineyards

# Small structures in the vineyard

Due to mechanisation and land improvement in the middle of the 20th century, a large part of the small structures disappeared from the vineyard landscape. As a result, habitat for many animal and plant species was lost.

In recent years, the awareness of many winegrowers has changed and the realisation that shrubs and small structures have many positive aspects is increasingly leading to their replanting. By promoting pollinators and beneficial insects, small structures have an important function that is also beneficial for viticulture.

### The advantages of structures in viticulture:

- They allow the sensible use of accrued material such as harvest stones and vines/cuttings.
- They harbour a whole range of beneficial insects that help to limit the impact of potential pests on the vines.
- They contribute to improving the quality of the vineyard landscape.









#### Implementation

Many small structures can be created with material on site without much effort. Instead of removing the reading stones and old vines or branches from pruning, these can be layered to create structures.

### Branch piles and deadwood

**Functionality:** WImportant reproduction site for (deadwood) insects (including wild bees as pollinators), shelter, waiting and breeding place for reptiles, amphibians, weasels, hedgehogs and birds.

Optionally, a breeding chamber for weasels can be installed. Weasels play an important role in regulating the number of mice.





## Reading stone pile and stone lens

**Functionality:** Hiding, sunning and hibernation places for reptiles, hedgehogs and weasels.

**Maintenance:** Prevent overgrowth by brambles etc., leave a border of at least 50 cm around the structure.

It is important for branch and stone structures to have a well-sunlit location and a sufficient size (at least 2x2m and 1m high).

## **Reptile castle**

This is a combination of the two elements. In addition, a hole of approx. 50cm is dug in the ground. This creates a frost-proof hibernation site for reptiles and amphibians.

If the structure is supplemented with sand, the open ground provides a nesting site for groundnesting wild bees.



#### Implementation

#### Dry stone wall

**Functionality:** Hiding, sunning and hibernation places for reptiles, insects, hedgehogs and weasels. Landscape-shaping character. Stability on slopes, enables terracing and improved use of land.





## Open ground patches, ruderal areas and patchy vegetation

**Functionality:** reproduction site for ground-nesting insects (e.g. wild bees), accessibility of food for insectivorous animals (e.g. birds).

## **Nesting boxes**

The installation of various nesting aids on vineyard huts or other buildings promotes the diversity of bird species with comparatively little effort. Hollow stones in dry stone walls provide attractive nesting cavities for hoopoes, for example.



## What you should pay attention to when creating small structures

- Choose sunny locations, use on-site materials if possible.
- Choose a location so that it does not interfere with cultivation.
- Structures can be erected with a small amount of effort (except stone wall, this is more costly, possibly enquire with local nature conservation associations for support).
- Leave fringe around structures, some maintenance necessary (prevent overgrowth of structures with e.g. brambles).
- Combination of different small structures.

**Cost :** Some of the structures can be created without cost with materials on site. Dry stone walls and reptile castles are more expensive and require machinery.



Aarau

### Domaine Binner



"The construction of dry stone walls has often been abandoned because they are very time-consuming and expensive. Unfortunately, such a construction does not fit into our time, when everything has to be done quickly and people no longer take time for such beautiful things. What is a pity is that a dry stone wall is a very long-term investment and can last for a century.

That is precisely why we decided to build our dry stone wall."

Michèle Ramponie, Ammerschwihr

## The partners

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## **Confinanced by**





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