

Partnership for Biodiversity Protection in Viticulture in Europe

Biodiversity Check for Vine Growers

Interview Guide

Preliminary note

1. This questionnaire provides a reliable guideline for individual training with vine-growers. Various references were consulted for compiling this questionnaire. They include the criteria of farming associations, studies of biodiversity in vineyards, criteria of resource efficiency in viticulture and the “Biodiversity Check for Enterprises” of the Global Nature Fund and the Lake Constance Foundation.
2. In our terms “biodiversity” means
 - the variety of animal and plant species and other organisms
 - the variety of habitats and ecosystems and
 - genetic variability, including diversity of species, varieties and breeds cultivated or raised

This approach thus includes the conservation of species and habitats and also effects caused for example by global warming and aerial nitrification or intensive farming. Effects of human activities influence biodiversity in many ways and not solely by direct impacts. Thus, we need to consider direct as well as indirect factors to stop biodiversity loss.

3. This training material serves to educate vine-growers regarding the effects of their business on biodiversity. The vine-grower will get an overview of the status of biodiversity performance on the farm. Based on this, trainee and trainer will develop an “Individual Biodiversity Training Concept” with measures for biodiversity protection on the farms.



To assess structures in the vineyards recent aerial pictures of agricultural parcels are very useful.

Contact data

Name of company:	Contact person:
Address:	Role in the company:
Phone:	E-mail:

Business data

1. Your business is:
☐ Professional winery ☐ Sideline or hobby winery ☐ Winegrower
2. Number of staff working on the winery/farm: _____
3. How many hectares of agricultural land does your farm cover:
In total? _____ ha
Agricultural land? _____ ha
4. Which production focuses do you have?
☐ Viticulture _____ ha
☐ Other; please specify:
..... ha ha
..... ha ha
5. Amount of own or leased land (% or ha) _____
6. What is your production concept?
☐ Conventional ☐ Integrated ☐ Organic
7. Do you cultivate your vineyards along a standard or label?
☐ No ☐ Yes, which one? _____
8. Do your clients impose specific demands for biodiversity management? (e.g. Delinat, Peter Riegel) ☐ No ☐ Yes, which one?: _____

9. Do you process grapes from other farms? How many in %? Where do these grapes originate from?

10. What developments do you intend for your company in the coming years? (less, constant, more in terms of area and/or quantity)



General features

1. Altitude: _____ a.s.l.
2. Average annual rainfall: _____ mm
3. Steep slopes: _____ %
4. Types of soils: _____



Other income

- ☐ Holiday accommodation - Guest/nights per year? _____
- ☐ Catering/Restaurant
- ☐ Farm market/Shop
- ☐ Oenotourism/Ecotourism



Part 1: Biodiversity within the management

1. Is biodiversity an important environmental and/or business aspect in your business?
2. Do you implement any environmental management system (EMAS, ISO 14001)? If yes, which biodiversity indicators do you report?
3. Do you set biodiversity goals in your annual management plan?
4. Do you identify possible negative effects of your activities on biodiversity? Do you take actions to prevent or minimise negative effects?
5. Which opportunities and risks do you see in the context of biodiversity loss?
6. Do you check possible effects of your service providers and suppliers on biodiversity?
7. What information/support/tools do you need to improve your biodiversity management?
e.g. flyers, technical guides/sheets, guides for identification



Part 2: Cultivation and production process in the vineyard



Vineyard cultivation/types of grape

1. How many grape varieties do you cultivate? _____

Please indicate the major varieties and their levels (ha or %):

2. Do you cultivate traditional or rare grape varieties or do you intend to?

Local/traditional (typical in region for a long time): _____

Rare (barely cultivated elsewhere): _____

3. Do you cultivate fungi-resistant varieties (PIWIs) (ha)?

4. Distribution of agricultural plots in the landscape:

Number of plots _____

Smallest plot _____ ha

Biggest plot _____ ha

Average size _____ ha

5. How much grapes do you harvest per hectare? _____

6. How many hectolitres do you produce with this yield? _____

7. What materials do you use for espaliers (wooden poles, steel)?

8. Do you get subsidies from agro-environmental-programmes (AEPs)? If yes, which areas, measures and for how long?





Ground cover of vineyards

1. Please explain ground cover management in your vineyards:

a.) Vegetation

☐ No ground cover _____ ha

☐ Spontaneous _____ ha

☐ Sowed _____ ha

❖ If seeded, what seeds/seed mixtures do you use? Only functional (e.g. grass, legumes) or with biodiversity aspects (e.g. flowers, herbs)?

❖ If seeded, do you use annual or perennial seed mixtures?

❖ If spontaneous, do you know how many different plant species your ground cover has?

If yes, please describe the most frequent species:

b). Duration

☐ Permanent _____ ha

☐ Seasonal _____ ha - how many months a year? _____

c). Area within the vineyard with ground cover

☐ Total

☐ Partial

If partial, please describe if it is every second row, every third row etc :

2. Do you use reseeding as a measure to enhance biodiversity in the ground cover?

3. How do you manage the spaces underneath the vine rows?

4. Does the headland have ground coverage? Natural vegetation or seed mixtures?



5. Explain treatment of the ground cover over the year:

- ☐ Mulching
- ☐ Cutting/mowing
- ☐ Rolling

Is the treatment carried out in every row or in every second row? _____

How often is the ground cover treated? _____

6. Do you consider the phenology of the ground cover (need of blooming and seed formation, to allow the spread of their seeds), before deciding to cut it?

7. What is the height of the ground cover after you worked on it?

8. Do you perform the management of the ground cover on cloudy/rainy days, early in the morning or late in the afternoon to reduce the negative impact on fauna?

9. Do you use any further action to enhance the presence of the ground cover?

10. Ideas/plans/potential for improvement?

Tillage

1. What kind of tillage do you apply? (only superficial loosening, ploughed/breaking (turn over or not turn over))

2. When and how many times?

3. Is the soil tilled between October and March?

4. Over the year, how many times do you have to enter the vineyards with the tractors, including all treatments (tillage, plant protection, fertilisation, etc)?

5. Have techniques been used to improve or maintain soil structure and to avoid soil compaction?

6. Ideas/plans/potential for improvement?



Fertilisation management

1. What kind of fertilisers do you use?
 - ☐ Organic fertiliser and/or compost
 - ☐ Commercial organic manures
 - ☐ Mineral fertiliser and/or calcium carbonate
2. How much kg N/ha is manured to the plants per year? _____
3. How much kg N/ha has been manured to the plants in the last three years (in total)? _____
4. When are the vineyards fertilised?
5. How do you identify the fertiliser requirement of the plants?
6. Do you apply additional fertiliser treatments for leafs and plant strengthening?
7. How often do you carry out soil analyses? _____
8. Ideas/plans/potential for improvement?



Pest and disease management

Pesticide/plant protecting agents

1. Please identify the main pests/diseases present in your vineyard:

2. What measures do you carry out in the following categories?

Prevention (e.g. varieties, location of vineyard, enough space between rows):



Observation and monitoring (e.g. pheromone traps):

Intervention:

	Active ingredient	Times of application	kg/ha	How often?
Herbicides				
Fungicides				
Insecticides				
Others				

3. What is the average amount of copper? _____ kg/ha
4. What is the average amount of sulphur? _____ kg/ha
5. How do you minimise the influence of your treatments to neighbouring crops or protected areas? (demarcation, hedge, buffer strips etc.)
6. Do you use bacteria preparations according to Annex II EU-DVO 889/2008?
7. How do you combat mice and other rodents? _____
8. Ideas/plans/potential for improvement?



Part 3: Ecological infrastructures in the vineyard, ecological compensation areas

Aim: as many ecological infrastructures as possible in all vineyards. The foundation for this part of the questionnaire are aerial pictures of agricultural parcels.

1. Do you possess areas or patches not used for agriculture/vine-growing?

What is the amount of such areas on your property/farm? _____

2. How is the arrangement of these areas within the vineyards? (equally distributed over all parcels/only some parcels have ecological structures or areas)

3. What natural structural elements exist on the farm? If you have numbers please quantify:

- | | |
|---|---|
| <input type="checkbox"/> Slope, bank, embankments with natural vegetation | <input type="checkbox"/> Forest edges |
| <input type="checkbox"/> Flower stripes | <input type="checkbox"/> Tree line, avenue |
| <input type="checkbox"/> Fallow land | <input type="checkbox"/> Single trees |
| <input type="checkbox"/> Hedges, bushes and copses | <input type="checkbox"/> Cottage in the vineyard |
| <input type="checkbox"/> Dry wall/stone wall/clearance cairn | <input type="checkbox"/> Water elements (ravine, stream, ditch) |
| <input type="checkbox"/> Earth road or grass road | <input type="checkbox"/> Riparian galleries |
| <input type="checkbox"/> Others: _____ | |

4. Do you have any extensively managed areas?

- | | |
|---|----------|
| <input type="checkbox"/> Farmland with conservation management agreements (marsh areas) | _____ ha |
| <input type="checkbox"/> Field and grassland without fertilisation and pest management | _____ ha |
| <input type="checkbox"/> Rotational set-aside and fallow land sown with wildflowers and herbs | _____ ha |
| <input type="checkbox"/> Ruderal areas | _____ ha |
| <input type="checkbox"/> Meadow orchard | _____ ha |
| <input type="checkbox"/> Grassland with maximum two grass cuts yearly | _____ ha |
| <input type="checkbox"/> Unmanaged, edges or strips not used for grazing | _____ ha |
| <input type="checkbox"/> Others: _____ | _____ ha |

5. Is part of your farmed land set-aside area? _____ ha

If yes, how do you manage these areas, if at all (e.g. mowing once a year to prevent succession)?

What is the current occupation of such areas?

- ☐ Forest
- ☐ Scrubland
- ☐ Fallow
- ☐ Others

6. Is there biodiversity monitoring (identification/quantification of species) on your farmland?
7. Is there any information about endangered species on your farm? Species lists? Are there any threatened or characteristic species in the vineyards?
8. Do you apply any species specific measures to promote them on your farm?
9. Are there any concerns regarding invasive species? How do you deal with it?
10. Are the vineyards included in or border with a nature reserve, conservation areas or other areas with high biodiversity?
- 10.1. If so, can you please specify which kind (Natura2000, park, etc)
- 10.2. Is the vicinity of those areas considered in the cultivation of the vineyards?
- 10.3. Do you apply any biodiversity conservation measures in the vineyards, taking into account its particularities?
- 10.4. If so, please give some examples
11. Do you see potential for improvement and for adding ecological structures?

Part 4: Harvest, cellar and vinification

1. How do you harvest the grapes? ☐ Mechanically ☐ Manually
2. Do you pay attention to manufacture, origin and energy consumption when buying machines, equipment, pipes, tanks etc?
3. Do you pay attention to the origin of wooden barrels (oak from the region, FSC, PEFC)?
4. Do you consider certification of suppliers? _____
5. What products are used for cleaning the cellar and how is this water managed?
6. Which ingredients do you use for vinification (e.g. sugar, bentonite, ...)?
7. Ideas/plans/potential for improvement?

Part 5: Bottling/packaging

1. Do you purchase used bottles or bottles made from recycled glass (brown or green glass)? _____
2. What is the average weight of the bottles you fill? 1 litre _____g; 0,75 litre ____ g; others _____g
3. Which closures do you use and in which percentages (cork, screw closures, twintop, plastic cork, other)?
4. Do you apply additional plastic caps when using cork? _____
5. Do your etiquettes, printed products and packaging cases originate from sustainable forestry (FSC/PEFC) or are they recycled?
6. Does your print office have an environmental management system or carry out activities to protect biodiversity? (e.g. using ecological printing inks; chemical-free printing plates)
7. Ideas/plans/potential for improvement?

Part 6: Sales/logistics

1. How and in what share is your wine marketed?
☐ Cooperative ☐ Retail ☐ Farm shop/direct marketing
2. How is wine sold? % barrelled wine % bottled wine
3. Do you have an impact on what bottles are used (light, recycled) when filling?
4. Do you take bottles back? What percentage? _____
5. Transport: What major means of transport are used for delivering your products to the processor/client?

National:

International:
6. If you/a person from your company is delivering wine what is the range? _____
km
7. What products do you sell in your shop and are certifications important?
8. Is there an approach for CO₂ compensation?

Part 7: Energy/water/waste management



Power consumption

1. Do you monitor private and business electric energy consumption?
2. Is there any potential to reduce power consumption?
3. Do you produce and/or use renewable energies?
4. Do you use energy for irrigation? If yes, do you have any system to reduce energy consumption (e.g. power regulator)?



Water consumption

1. Do you monitor private and business water consumption?
2. If so, please specify your water consumption
Total _____ m³
For irrigation/cultivation _____ m³
For processing _____ m³
3. How do you irrigate your vineyards?
☐ Drip irrigation ☐ Watering ☐ Other
4. Do you have any decision-support tool for adjusting irrigation (tensiometric probes, dedicated studies, meteorological stations, etc.)?
5. How long does the irrigation tape last in the field? How do you manage the old irrigation tape?
6. Do you check the irrigation system frequently to detect water spillage?
7. At what time of the day do you irrigate?
8. Do you use water from wells or surface water? _____
9. Is water scarce in the area and/or are there any signs of level decrease of groundwater?





Wastewater treatment

1. Is wastewater stored intermediately?
2. Is there effluent treatment beyond the legal requirements?
3. Do you have a special yeast treatment (in vine-villages)?
4. Is the winery connected to municipal wastewater treatment?
5. Do you analyse residual water on your winery?



Waste production

1. How do you treat waste? (residual waste, organic waste, packaging, synthetic materials, paper, cardboard, cardboard packaging, glass, timber, mineral waste, metal, rubber, cork, special waste)
2. Do you perform any kind of separation, re-utilisation or recycling of your waste?

Part 8: Surrounding of winery/farm/company premises

1. Do clients experience your environmental and biodiversity activities at your winery?

2. Do you have on your winery:

- ☐ Native deciduous trees and shrubs
- ☐ Cottage garden/garden with native flowering plants, herbs
- ☐ Fruit trees, berries....
- ☐ Dry walls (including facades with raw natural stone)
- ☐ Unpaved yard areas with occurrence of wild herbs
- ☐ Nesting aid and water supply for birds, bats and wild bees
- ☐ Green roofs
- ☐ Others:.....

3. Are there plans for construction?

If yes, is the conservation of ecologically important habitats considered?

If yes, are ecological norms considered?

Part 9: Marketing/communication



Marketing

1. Do you communicate your biodiversity actions? (e.g. notifications about biodiversity, etc.)
2. Do customers ask questions about biodiversity? Is biodiversity a keyword in marketing and communication of yours?
3. How do you communicate with customers, suppliers and stakeholders in terms of biodiversity?
4. Do you have best practice for your marketing? Which opportunities do you see?



Stakeholders

1. Do you cooperate and communicate with NGOs, investors, local or regional administrations or scientific institutions to work on biodiversity aspects on a local level?
2. Do you receive financial reward for biodiversity, e.g. re-cultivation projects? If yes, what kind of stakeholder is it? (NGOs, trade associations, municipality, etc.)?
3. Are you a member of an initiative dealing with biodiversity themes? If yes, in which and what is your part?



Internal communication

1. Do you have a volunteer programme for your staff targeting biodiversity topics?
2. Do you have a policy for business transport and business trips to reduce emissions, energy consumption or other indirect impacts on biodiversity?
3. How is your staff introduced to biodiversity topics?



Additional information



Imprint

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Project partners

Germany

Lake Constance Foundation

Dr. Kerstin Fröhle

Kerstin.froehle@bodensee-stiftung.org

Global Nature Fund

Dr. Thomas Schaefer

schaefer@globalnature.org

Ecovin - Federal Association of Organic Viticulture

Ralph Dejas

r.dejas@ecovin.de

Spain

Fundación Global Nature

Ernesto Aguirre y Jordi Domingo

eaquirre@fundacionglobalnature.org

jdomingo@fundacionglobalnature.org

Spain

La Unió

José Castro León

jcastro@launio.org

Portugal

Quercus

Paula Lopes da Silva

paulasilva@quercus.pt

ADVID – Associação para o Desenvolvimento da Viticultura Duriense

Cristina Carlos

cristina.carlos@advid.pt

Turkey

Rapunzel Organik Tarım Urunleri

Sahin Ince & Emrah Dagdeviren

sahin.ince@rapunzel.com.tr

emrah.dagedeviren@rapunzel.tr

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Thomas Schaefer (GNF)

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