



VITICULTURE GROWTH  
SUMMARY REPORT  
2021  
IMPACT ASSESSMENT



# Foreword



**This is the first growth impact assessment conducted on viticulture and wine production in a protected landscape that has ever been carried out in this country.**

The South Downs National Park Authority (SDNPA or National Park Authority) commissioned the research from the consultants Vinescapes as we needed to understand the impact of the rapid increase in viticulture and associated wine production on our cherished landscape. The scale of this growth is indeed impressive with a 90% increase in vineyard coverage in the South Downs National Park (National Park) since 2016 with approximately five new vineyards planted every year. The scale of this recent growth is, however, dwarfed by potential future growth. More than a third of farmland in the National Park, covering almost 40,000 hectares of land, is considered suitable for viticulture if current trends of temperature increases caused by climate change are realised.

The South Downs National Park benefits from the highest level of landscape protection in the country. It has two statutory purposes to, firstly, conserve and enhance the natural beauty, wildlife and cultural heritage of the area and, secondly,

promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public. The National Park Authority also has a duty when carrying out the purposes to seek to foster the economic and social well-being of the local communities within the National Park. The landscape of the South Downs has been shaped by human activity over millennia and it continues to evolve as a dynamic process. The National Park Authority has a key role in helping to manage and guide change to ensure that the special qualities of this landscape remain both respected and cherished.

The purpose of this study is to improve our understanding of the impacts of viticulture and wine production in the National Park within the context of our purposes and duty. It includes careful analysis of the environmental, socio economic and visual impacts of viticulture and wine production whilst addressing the impact of climate change. There has been extensive work with our local communities through the SDNPA

Citizens Panel and a series of interviews with local vineyard managers.

I commend this study to you and would like to thank everyone involved in its production. I hope the study will become a valuable source of evidence for a range of stakeholders for many years to come including existing and prospective vineyard owners and managers, local communities and all those with an interest in our National Park.

**Ian Phillips,**  
Chair, South Downs National Park Authority



# VITICULTURE IN THE SOUTH DOWNS NATIONAL PARK

## KEY FACTS

VINEYARDS...

**51** 

+

WINERIES

**11** 

**90%**  
INCREASE IN  
VINEYARDS

since 2016  
(27 to 51)



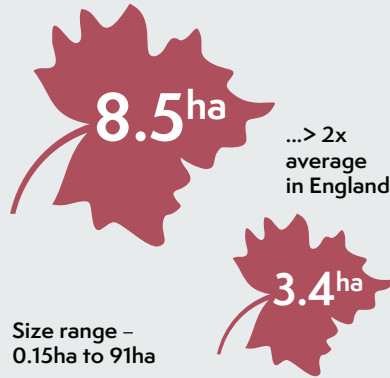
AVERAGE VINEYARD SIZE...

**8.5ha**

...> 2x  
average in  
England

**3.4ha**

Size range –  
0.15ha to 91ha



## ENVIRONMENT

LAND IN VINEYARDS  
COVERED BY VINES

**20%**



FARMLAND

VINEYARDS  
**0.4%**



SUITABLE FOR VINEYARDS

**34%**



## TOURISM

2018

VISITORS TO VINEYARDS  
& WINERIES

**33,000**



AVERAGE SPEND PER  
VISIT\*

**£62**

...compared to an  
average National  
Park visitor spend  
of £12.31

\* South Downs  
Visitor Survey 2018

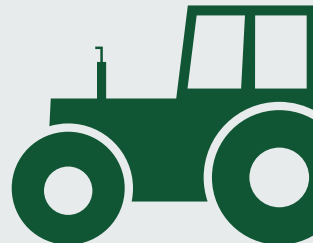


## ECONOMY

VINEYARDS  
EMPLOY

**17x**

...more people per  
hectare than  
traditional farming



BOTTLES OF WINE PRODUCED

**2.5m**  
each  
year



...CONTRIBUTING

**£54m**  
(GVA)

...OF WHICH

**£24.5m**  
(GVA)

is directly from wine sales



## SOCIAL

SDNPA Citizens Panel 2019

POSITIVE IMPACT

**54%**



...thought an increase in vineyards  
would have a positive impact on  
view & character of the landscape

**30%**

of survey respondents  
had visited a South  
Downs vineyard

**93%**

aware of the presence  
of vineyards in the  
National Park



**SOUTH DOWNS  
NATIONAL PARK**  
CELEBRATING 10 YEARS

### Grape growing and winemaking in the South Downs National Park

This summary report sets out key findings of a detailed study commissioned by the National Park Authority into the impact of grape growing and winemaking within the South Downs National Park (National Park) on the environment, landscape, economy and community.

### The buzz around English wine

Viticulture (the cultivation of grapes) and winemaking in the UK have increased significantly in recent years. The total vineyard area expanded by over 300% between 2005 and 2019, to almost 3,500 hectares (ha) under vine. There are now more than 750 vineyards in England and Wales, which in 2018 produced more than 13 million bottles of wine. The boom in English winemaking has been underpinned by climate change, which has led to longer, warmer growing seasons more suitable for commercially desirable grape varieties. In the early 2000s, grape growers and wine experts alike were delighted to discover that high-quality sparkling wines

could be made from English-grown grapes of the classic Champagne varieties: Chardonnay, Pinot Noir and Meunier. Subsequent awards and exceptional wine quality has triggered increased local, national and international interest in southern England as a new wine-producing region.

### A special landscape for exceptional wines

For centuries, vineyards and wine producers the world over have drawn on landscapes, soils, climate, culture, and a sense of place (terroir) to craft and enhance the uniqueness of their wines. Vineyards in the South Downs are no exception. Commercial vineyards have existed within the National Park area since the 1950s, and there are references to vineyards in the area going back hundreds and even thousands of years! Then, as now, the special nature of the South Downs National Park provides a working landscape that helps produce wines of provenance.

As well as being the home to Plumpton College, the UK's leading viticulture and winemaking training centre, there are 51 vineyards and 11 wineries in the National Park (2019). This is a 90% increase in the number of vineyards since 2016,

or roughly five new vineyards planted every year. Vineyards currently cover 436 ha, or around 0.4% of farmland in the National Park, which represents 12% of the total area of vineyards in the UK. However, in total, the National Park has 39,700 ha (34% of its farmed area) of land suitable for viticulture. If just one-tenth of this land (3,970 ha) were to be converted for growing grapes, this would represent an area larger than the current UK viticulture sector, and more than 22 million bottles of wine could be produced annually!

### The impact of climate change

As seen in the South Downs, recent trends show viticulture to be one of the fastest-growing sectors in English agriculture. This growth is unquestionably underpinned by climate change, and research has concluded that, under projected future climate change, viticulture potential will continue to increase in higher-latitude regions such as the UK. Observed trends in air temperature, along with UK climate projections from the Met Office (2018), suggest the South Downs will become more widely suitable for sparkling and still wine production over the next few decades. The potential changes of land use to viticulture have therefore raised

questions for the National Park Authority regarding the impact of this recent, and any future, growth on the National Park.

### Viticulture and the winemaking process

Grape growing and winemaking activities vary depending on the vineyard location, grape varieties, target wine styles, and individual producers' preferred growing and production techniques, but generally, in the UK, the process includes:

- Planting vines in rows running in a northerly–southerly direction, at a density of 3,500 to 5,500 vines per ha. The vines are then trained to a trellis structure.
- Keeping the land directly beneath the vines weed-free, using herbicides, cultivation, or a combination of the two.
- Allowing the natural sward, sown grass, plants or wildflowers to grow in the alleys between the rows of vines and in the headlands. Vines normally only cover 15–20% of the vineyard area.
- Managing the vines and vineyard through an annual cycle of operations, including maintaining trellising, cutting or grazing ground-cover, managing the growth of vines,

managing pests and diseases, and harvesting the grapes in late autumn.

- Waiting at least 3 years after planting for the first harvest.
- Winemaking, a skilled process that includes pressing the grapes, fermentation, filtering, blending, bottling, ageing and packaging. Sparkling wine often requires ageing for at least 2 years before being released to market.

### Environmental impacts of wine production in a protected landscape

Viticulture brings with it both environmental and landscape impacts that can be harmful when not properly managed, particularly in a nationally protected landscape such as the South Downs National Park. Great care must be taken to protect the environment, particularly soils and watercourses that help shape the National Park's unique habitats and ecosystems.

Pesticides are one of the main risks in vineyards because they can cause environmental damage and harm people and wildlife. Pesticide application rates in vineyards have traditionally been higher than those required for arable crops, such as wheat, although application rates may

mask the strength of the applied products. The study recommends where there are opportunities to reduce pesticide use these should be taken.

Vineyards capture a lot of carbon through their vines, ground-cover plants, and soils. However, greenhouse gases, which contribute to climate change, are also emitted by vineyard machinery as well as through the winemaking process. Again, where there is potential to reduce or offset these emissions or capture CO<sub>2</sub>, these should be adopted.

Managers of vineyards located within the National Park were interviewed as part of the study, and all wanted to do more to protect and enhance the wider environment in which they work. Examples of good practice were found, such as where managers are involved in activities to enhance biodiversity. In fact, the study found there are greater opportunities in vineyards than conventionally managed arable farmland (often the land vineyards replace) to enhance ecosystem services. These opportunities include growing native plants in and around the vineyard, encouraging species-rich grass swards and wildflowers in alleyways, encouraging beneficial predators of pests, increasing soil microbial diversity, allowing grazing and encouraging wildlife havens.

### Visual impacts of viticulture on the South Downs National Park landscape

The fundamental character of the South Downs, such as their open quality, could be affected by vineyards. The raised, linear nature of vines and trellising is very different to arable crops or pastureland, and the report found that there is potential for visual degradation if the scale of vineyards is too extensive or if they are inappropriately located. The study includes several iconic National Park views, in which potential for viticulture exists, to understand how vineyards could appear or be integrated within the landscape. One example is set out to the right.

These images show the visual impact of vineyards on the landscape. Where they are well placed and sensitively proportioned, they integrate well. However, to address a potential loss of openness, tranquillity, or key views, the report recommends that landscape integration is given significant consideration by those establishing vineyards, with the aim of minimising any negative impacts.

OUSE VALLEY, NEAR LEWES (ORIGINAL IMAGE)



OUSE VALLEY, NEAR LEWES – ARTIST'S IMPRESSION, SHOWING A VINEYARD IN THE CENTRE





### Planning policy for viticulture and winemaking.

Before any expansion of vineyards, wine production facilities and related infrastructure can be undertaken, national and local planning policies must be considered. To this end, the National Park Authority is publishing a technical advice note (TAN) on viticulture, the purpose of which is to explain how to make successful planning applications for new vineyard, winemaking and other related developments that deliver multiple benefits for the National Park. The TAN is primarily written for existing and prospective vineyard owners, estate managers, planning agents, Members, planning case-officers, and consultees on planning applications. The TAN outlines how all development proposals for viticulture and winemaking should adopt a landscape-led approach to design that makes a positive contribution to the overall character and appearance of the area.

### Socio-economics of viticulture and winemaking in the South Downs National Park

The study identified that a growth in viticulture and winemaking could positively impact the National Park economy, including benefits for employment, education and tourism. The key findings of the study include:

- The current potential to produce 2.5 million bottles of wine annually.
- A contribution to the wider economy of £54 million gross value added (GVA), with £24.5 million (GVA) directly from wine sales.
- A total of 358 people directly employed by National Park vineyards and wine producers, including seasonal labour. Vineyards employ up to 17 times more people per ha than traditional arable farming.
- Up to 33,000 tourists visiting National Park wine destinations annually, with winery visitors spending £62 each, compared with an average National Park visitor spend of £12.

If vineyard area and wine production in the National Park doubles, to almost 1,000 ha, the study estimates 800 people (full-time equivalent jobs) could be employed, an annual contribution to the wider economy of £127 million GVA could be provided, and upwards of 75,000 tourists could visit each year.

The SDNPA Citizens Panel was consulted as part of the study, to gather members' opinions on viticulture and wine production in the South Downs National Park. Most respondents thought that vineyards could bring positive economic benefits through training and employment (84%), diversifying and regenerating rural areas (76%), and enhancing the National Park as a tourist destination (52%). A majority (54%) of respondents also thought more vineyards would positively impact the views and general character of the National Park landscape, 15% thought there would be no impact, 19% were unsure, and 12% thought an increase in vineyards would have a negative impact.

## Conclusion

The South Downs represents an increasingly favourable location for viticulture and the production of high-quality wine, due to a combination of viticulturally suitable land and climate. However, the South Downs National Park is a nationally protected landscape, and the study notes the potential harm that viticulture could do if scale, location, and environmental management are inappropriate. Nevertheless, much of the National Park is already a working landscape, shaped by hundreds of years of farming and rural enterprise, and here adaptation to climate change and diversification into viticulture can bring positive contributions and multiple benefits to the South Downs and its communities.

The findings of the South Downs National Park Authority study into viticulture conclude that if future decisions surrounding viticulture and wine production include evidence-based consideration of the potential environmental, landscape and local community impacts, then the sector can deliver the wider benefits of viticulture and contribute positively to the unique qualities of the South Downs National Park.

## References

1. SDNPA Viticulture Growth Impact Assessment 2021  
[southdowns.gov.uk/wp-content/uploads/2021/03/FINAL-VERSION-VGIA-V1.6-compressed.pdf](https://southdowns.gov.uk/wp-content/uploads/2021/03/FINAL-VERSION-VGIA-V1.6-compressed.pdf)
2. Wine GB. (2019). An Industry Coming of Age. Retrieved from  
[winegb.co.uk/wp-content/uploads/2019/09/2019-Industry-coming-of-age-WineGB-industry-report-2019.pdf](https://winegb.co.uk/wp-content/uploads/2019/09/2019-Industry-coming-of-age-WineGB-industry-report-2019.pdf)
3. Defra. (2016). Agriculture Survey, English National Parks statistics.
4. Met Office. UKCP18. Retrieved from  
[metoffice.gov.uk/research/approach/collaboration/ukcp/index](https://metoffice.gov.uk/research/approach/collaboration/ukcp/index)
5. South Downs Visitor Survey 2018. £12.31 tourist spend.
6. SDNPA Citizens Panel 2019. Retrieved from  
[southdowns.gov.uk/volunteering/citizens-panel/](https://southdowns.gov.uk/volunteering/citizens-panel/)
7. SDNPA (2021) Viticulture Technical Advice Note  
[southdowns.gov.uk/planning-policy/supplementary-planning-documents/technical-advice-notes-tans/viticulture-technical-advice-note-tan/](https://southdowns.gov.uk/planning-policy/supplementary-planning-documents/technical-advice-notes-tans/viticulture-technical-advice-note-tan/)

