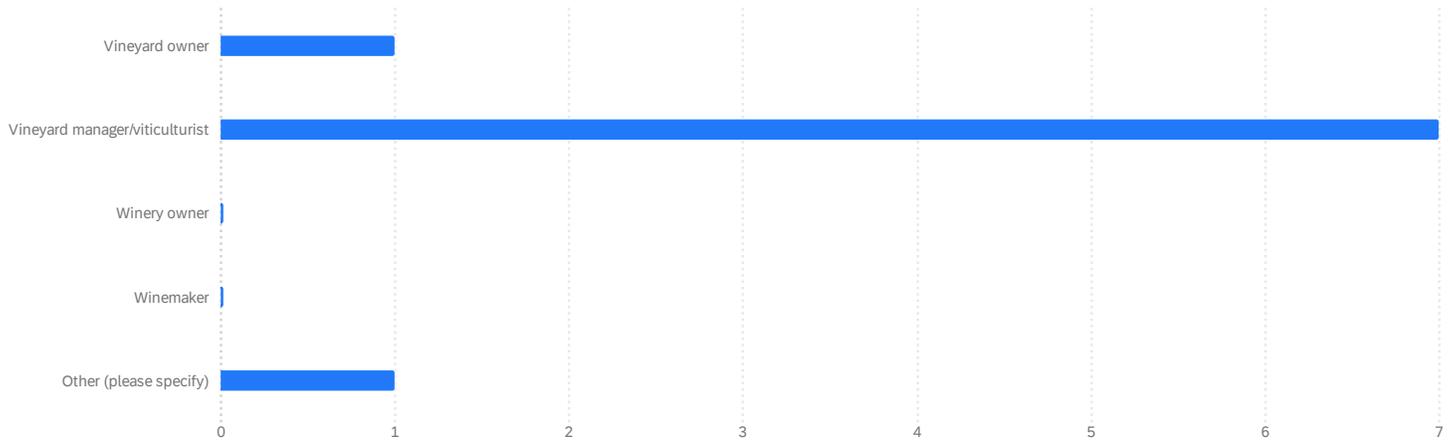


Indicate your employment or relation to the wine grape industry. 9 ⓘ



Indicate your employment or relation to the wine grape industry. 9 ⓘ

Q1 - Indicate your employment or relation to the wine grape industry. - Selected Choice

Percentage

Count

Vineyard owner

11%

1

Vineyard manager/viticulturist

78%

7

Winery owner

0%

0

Winemaker

0%

0

Other (please specify)

11%

1

Indicate your employment or relation to the wine grape industry. 9 ⓘ

Indicate your employment or relation to the wine grape industry.

Average

Minimum

Maximum

Count

Vineyard owner

1.00

1.00

1.00

1

Vineyard manager/viticulturist

2.00

2.00

2.00

7

Winery owner

-

-

-

0

Winemaker

-

-

-

0

Other (please specify)

5.00

5.00

5.00

1

And winery owner

Milton Freewater, OR

Milton Freewater OR

Walla Walla, WA

Walla Walla, WA Milton Freewater, OR

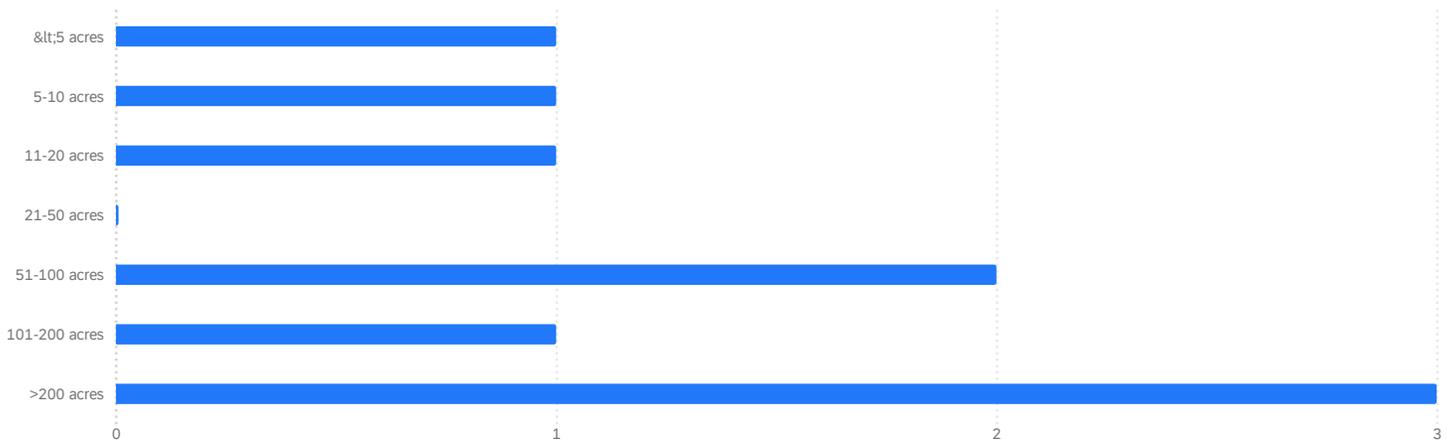
Walla Walla, WA

The Rocks

Milton-Freewater, OR; Walla Walla, WA; The Dalles, OR; Mosier, OR

Milton Freewater OR

Please indicate the total vineyard acreage you or your organization manages. 9 ⓘ



Please indicate the total vineyard acreage you or your organization manages. 9 ⓘ

Q3 - Please indicate the total vineyard acreage you or your organization manages.

Percentage

Count

Vineyard Acreage Range	Percentage	Count
<5 acres	11%	1
5-10 acres	11%	1
11-20 acres	11%	1
21-50 acres	0%	0
51-100 acres	22%	2
101-200 acres	11%	1

Q3 - Please indicate the total vineyard acreage you or your organization manages.

Percentage

Count

>200 acres

33%

3

Please indicate the total vineyard acreage you or your organization manages. 9 ⓘ

Please indicate the total vineyard acreage you or your organization manages...

Average

Minimum

Maximum

Count

<5 acres

1.00

1.00

1.00

1

5-10 acres

2.00

2.00

2.00

1

11-20 acres

3.00

3.00

3.00

1

21-50 acres

-

-

-

0

51-100 acres

5.00

5.00

5.00

2

101-200 acres

6.00

6.00

6.00

1

>200 acres

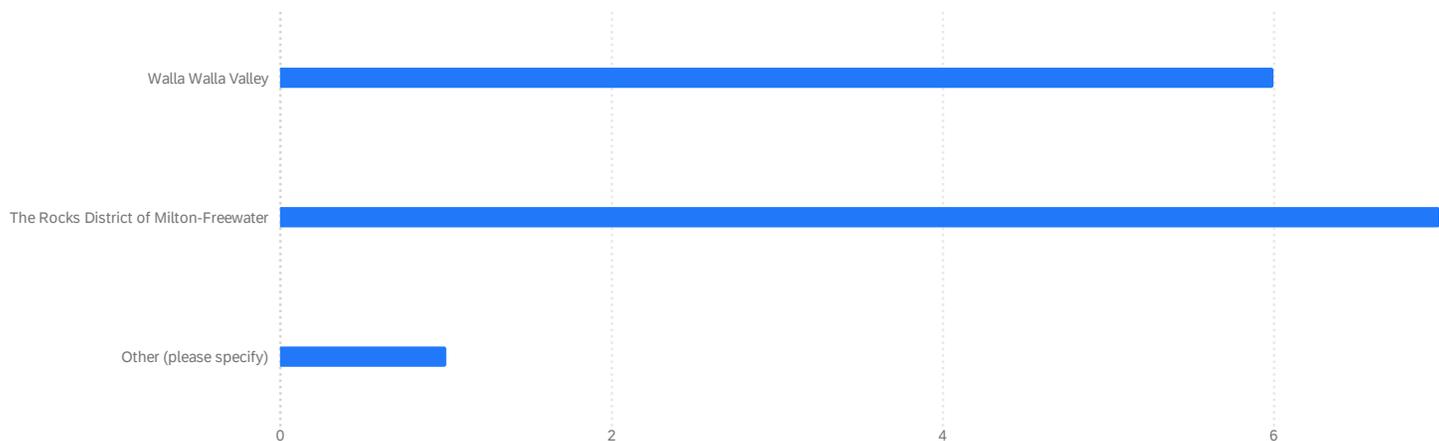
7.00

7.00

7.00

3

Indicate the American Viticultural Areas (AVAs) in which you or your organization manages vineyards. 9 ⓘ



Indicate the American Viticultural Areas (AVAs) in which you or your organization manages vineyards. 9 ⓘ

Q4 - Indicate the American Viticultural Areas (AVAs) in which you or your organization manages vineyards. - Selected Choice

Percentage

Count

Walla Walla Valley

67%

6

The Rocks District of Milton-Freewater

78%

7

Other (please specify)

11%

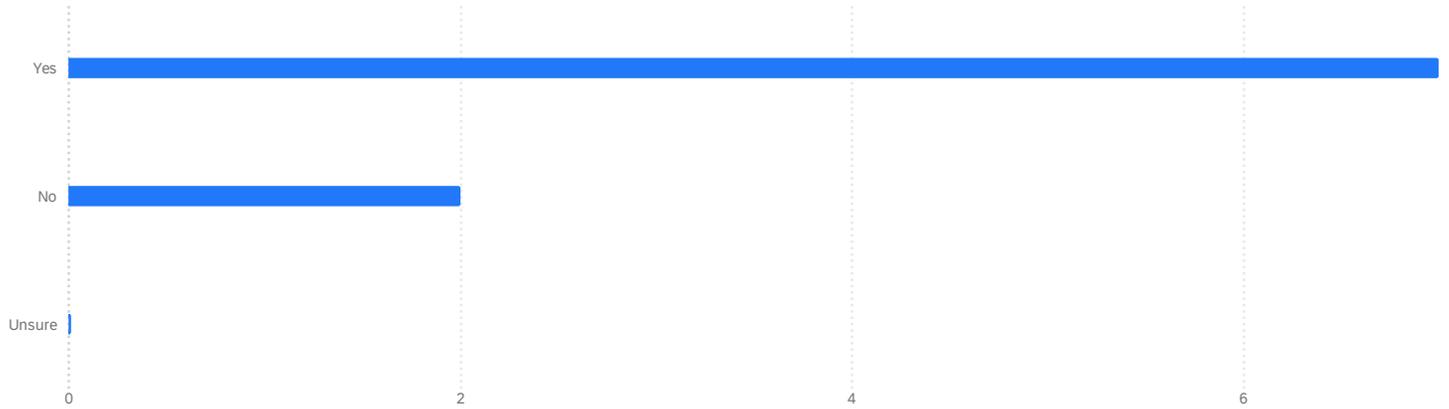
1

Indicate the American Viticultural Areas (AVAs) in which you or your organization manages vineyards.: Other (please specify) ⓘ

Gorge

Do any of the vineyards you or your organization manages have very rocky or cobbly soils, either within or outside of the Rocks District of Milton-Freewater AVA? ⓘ

9 ⓘ



Do any of the vineyards you or your organization manages have very rocky or cobbly soils, either within or outside of the Rocks District of Milton-Freewater AVA? ⓘ

9 ⓘ

Q5 - Do any of the vineyards you or your organization manages have very rocky or cobbly soils, either within or outside of the Rocks District of Milton-Freewater AVA?

Percentage

Count

	Percentage	Count
Yes	78%	7
No	22%	2
Unsure	0%	0

Do any of the vineyards you or your organization manages have very rocky or cobbly soils, either within or outside of the Rocks District of Milton-Freewater AVA? ⓘ

9 ⓘ

Do any of the vineyards you or your organization manages have very rocky or...

Average

Minimum

Maximum

Count

	Average	Minimum	Maximum	Count
Yes	1.00	1.00	1.00	7
No	2.00	2.00	2.00	2
Unsure	-	-	-	0

Rate your knowledge of vineyard cover crop use from 1 to 5 (1 = I don't feel at all knowledgeable, 5 = I feel very knowledgeable). 9 ⓘ



Rate your knowledge of vineyard cover crop use from 1 to 5 (1 = I don't feel at all knowledgeable, 5 = I feel very knowledgeable). 9 ⓘ

Q6 - Rate your knowledge of vineyard cover crop use from 1 to 5 (1 = I don't feel at all knowledgeable, 5 = I feel very knowledgeable).

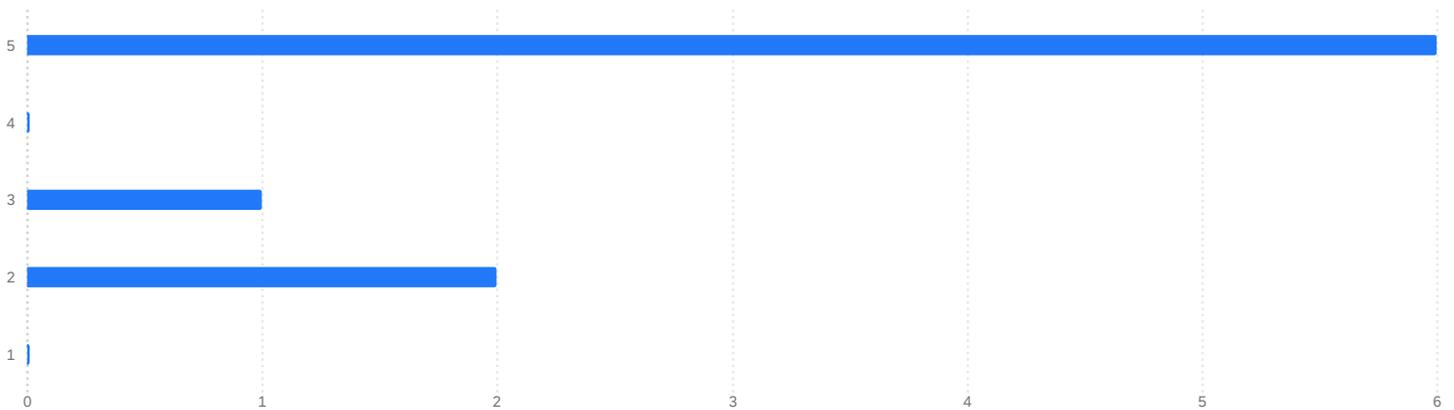
	Percentage	Count
5	33%	3
4	33%	3
3	11%	1
2	11%	1
1	11%	1

Rate your knowledge of vineyard cover crop use from 1 to 5 (1 = I don't feel at all knowledgeable, 5 = I feel very knowledgeable). 9 ⓘ

Rate your knowledge of vineyard cover crop use from 1 to 5 (1 = I don't feel...

	Average	Minimum	Maximum	Count
5	1.00	1.00	1.00	3
4	2.00	2.00	2.00	3
3	3.00	3.00	3.00	1
2	4.00	4.00	4.00	1
1	5.00	5.00	5.00	1

Rate your openness to using cover crops or resident/native vegetation in the vineyards you or your organization manages from 1 to 5 (1 = not at all open, 5 = very open). 9 ⓘ



Rate your openness to using cover crops or resident/native vegetation in the vineyards you or your organization manages from 1 to 5 (1 = not at all open, 5 = very open). 9 ⓘ

Q7 - Rate your openness to using cover crops or resident/native vegetation in the vineyards you or your organization manages from 1 to 5 (1 = not at all open, 5 = very open).

	Percentage	Count
5	67%	6
4	0%	0

Q7 - Rate your openness to using cover crops or resident/native vegetation in the vineyards you or your organization manages from 1 to 5 (1 = not at all open, 5 = very open).

Percentage

Count

	Percentage	Count
3	11%	1
2	22%	2
1	0%	0

Rate your openness to using cover crops or resident/native vegetation in the vineyards you or your organization manages from 1 to 5 (1 = not at all open, 5 = very open). 9 i

Rate your openness to using cover crops or resident/native vegetation in th...

Average

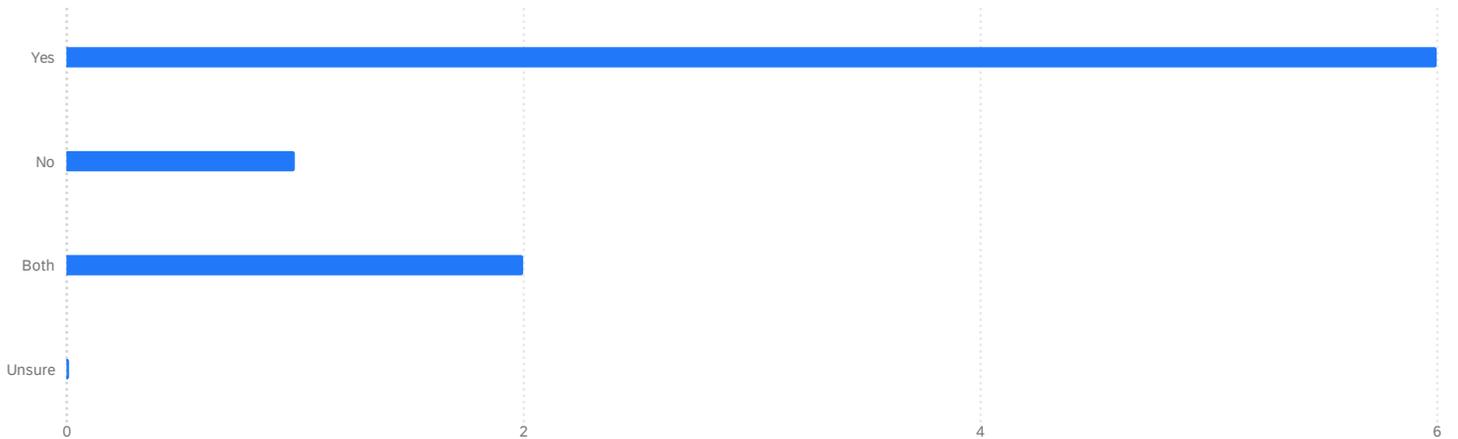
Minimum

Maximum

Count

	Average	Minimum	Maximum	Count
5	1.00	1.00	1.00	6
4	-	-	-	0
3	3.00	3.00	3.00	1
2	4.00	4.00	4.00	2
1	-	-	-	0

In the vineyards you or your organization manages, are cover crops or resident/native vegetation used at any time of the year? 9 i



In the vineyards you or your organization manages, are cover crops or resident/native vegetation used at any time of the year? 9 i

Q8 - In the vineyards you or your organization manages, are cover crops or resident/native vegetation used at any time of the year?

Percentage

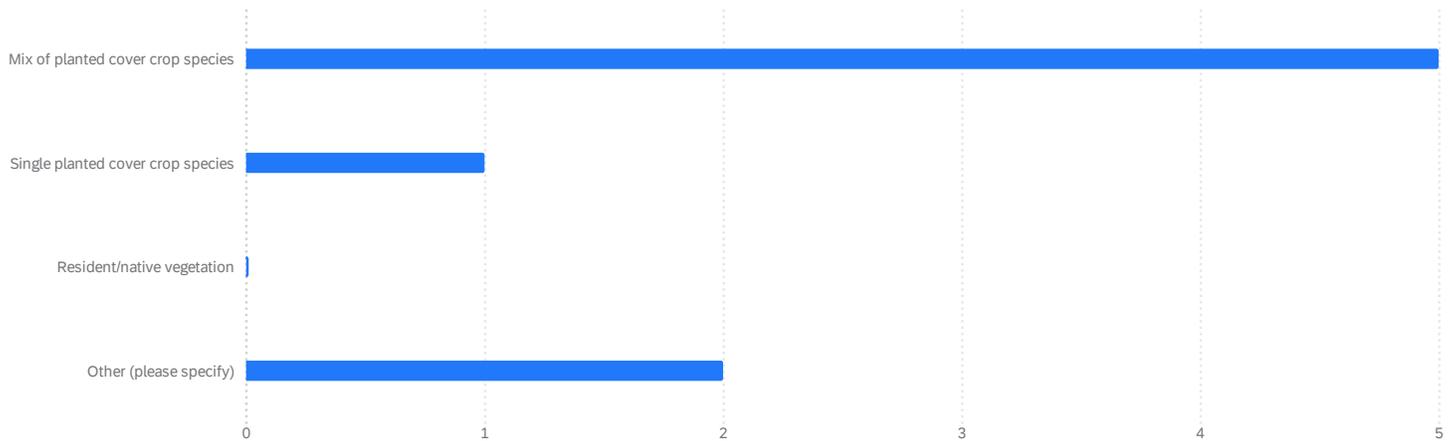
Count

	Percentage	Count
Yes	67%	6
No	11%	1
Both	22%	2
Unsure	0%	0

In the vineyards you or your organization manages, are cover crops or resident/native vegetation used at any time of the year? 9 ⓘ

In the vineyards you or your organization manages, are cover crops or resid...	Average	Minimum	Maximum	Count
Yes	1.00	1.00	1.00	6
No	2.00	2.00	2.00	1
Both	3.00	3.00	3.00	2
Unsure	-	-	-	0

If a cover crop or resident/native vegetation is maintained at any time of the year, is this vegetation generally: 8 ⓘ



If a cover crop or resident/native vegetation is maintained at any time of the year, is this vegetation generally: 8 ⓘ

Q9 - If a cover crop or resident/native vegetation is maintained at any time of the year, is this vegetation generally: - Selected Choice	Percentage	Count
Mix of planted cover crop species	63%	5
Single planted cover crop species	13%	1
Resident/native vegetation	0%	0
Other (please specify)	25%	2

If a cover crop or resident/native vegetation is maintained at any time of the year, is this vegetation generally: 8 ⓘ

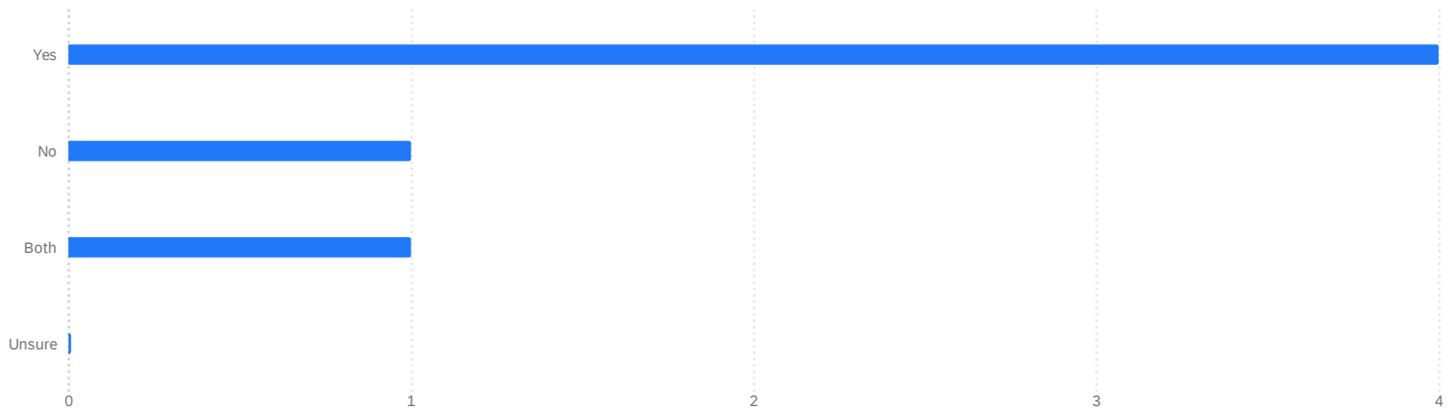
If a cover crop or resident/native vegetation is maintained at any time of...	Average	Minimum	Maximum	Count
Mix of planted cover crop species	1.00	1.00	1.00	5
Single planted cover crop species	2.00	2.00	2.00	1
Resident/native vegetation	-	-	-	0
Other (please specify)	4.00	4.00	4.00	2

If a cover crop or resident/native vegetation is maintained at any time of the year, is this vegetation generally:: Other (please specify) ⓘ

weeds

all of the above

For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), are cover crops or resident/native vegetation used at any time of the year? 6 ⓘ



For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), are cover crops or resident/native vegetation used at any time of the year? 6 ⓘ

Q10 - For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), are cover crops or resident/native vegetation used at any time of the year?

Percentage

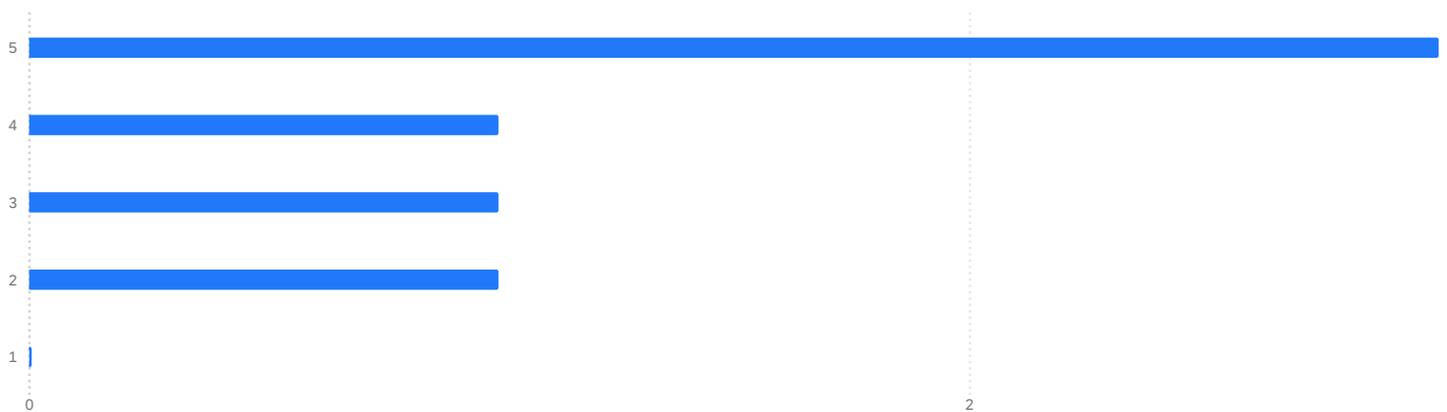
Count

	Percentage	Count
Yes	67%	4
No	17%	1
Both	17%	1
Unsure	0%	0

For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), are cover crops or resident/native vegetation used at any time of the year? 6 ⓘ

For your vineyards with very rocky or cobbly soils (within or outside of th...	Average	Minimum	Maximum	Count
Yes	1.00	1.00	1.00	4
No	2.00	2.00	2.00	1
Both	3.00	3.00	3.00	1
Unsure	-	-	-	0

11. For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), please rate your openness to using cover crops or resident/native vegetation in these vineyards from 1 to 5 (1 = not at all open, 5 = very open). 6 ⓘ



11. For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), please rate your openness to using cover crops or resident/native vegetation in these vineyards from 1 to 5 (1 = not at all open, 5 = very open). 6 ⓘ

Q11 - 11. For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), please rate your openness to using cover crops or resident/native vegetation in these vineyards from 1 to 5 (1 = not at all open, 5 = very open).

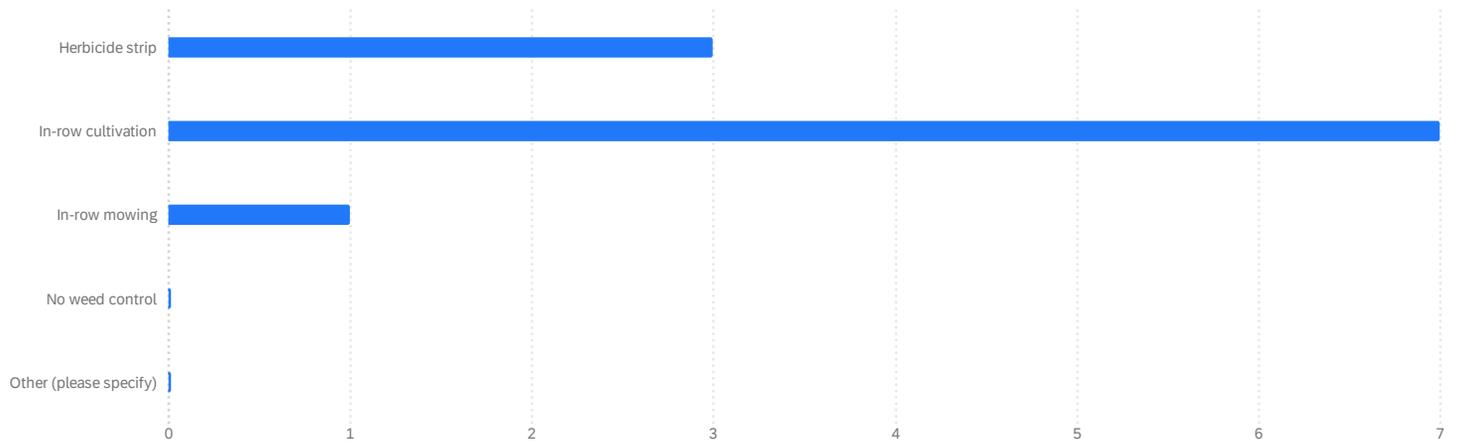
	Percentage	Count
5	50%	3
4	17%	1
3	17%	1
2	17%	1
1	0%	0

11. For your vineyards with very rocky or cobbly soils (within or outside of the Rocks District of Milton-Freewater AVA), please rate your openness to using cover crops or resident/native vegetation in these vineyards from 1 to 5 (1 = not at all open, 5 = very open). 6 ⓘ

11. For your vineyards with very rocky or cobbly soils (within or outside o...	Average	Minimum	Maximum	Count
5	1.00	1.00	1.00	3

11. For your vineyards with very rocky or cobbly soils (within or outside o...	Average	Minimum	Maximum	Count
4	2.00	2.00	2.00	1
3	3.00	3.00	3.00	1
2	4.00	4.00	4.00	1
1	-	-	-	0

12. In the vineyards you or your organization manages, how are weeds controlled within the vine row? 8 ⓘ



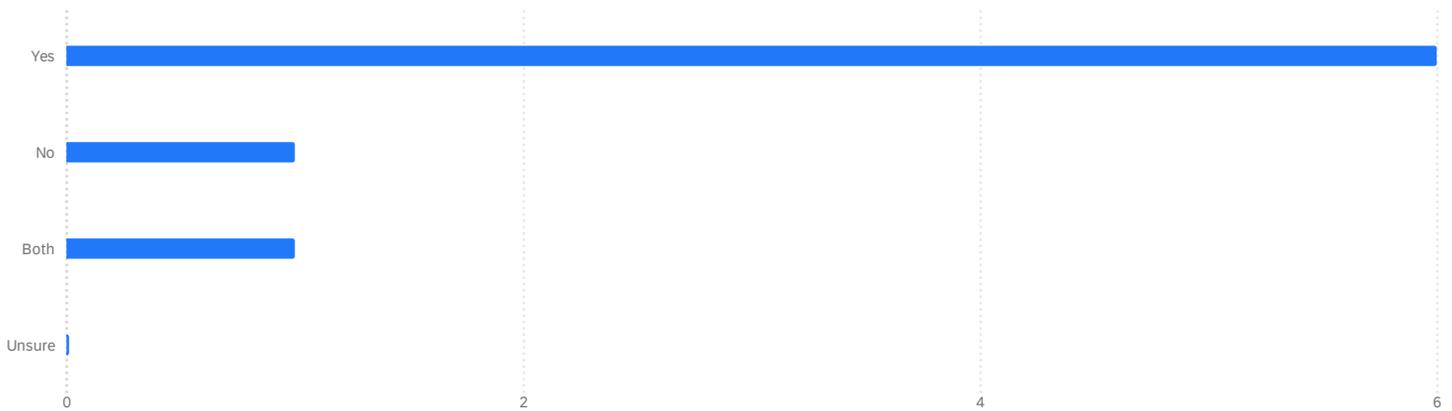
12. In the vineyards you or your organization manages, how are weeds controlled within the vine row? 8 ⓘ

Q12 - 12. In the vineyards you or your organization manages, how are weeds controlled within the vine row? - Selected Choice	Percentage	Count
Herbicide strip	38%	3
In-row cultivation	88%	7
In-row mowing	13%	1
No weed control	0%	0
Other (please specify)	0%	0

12. In the vineyards you or your organization manages, how are weeds controlled within the vine row?: Other (please specify) ⓘ

No data found - your filters may be too exclusive!

13. In the vineyards you or your organization manages, is vegetation between vine rows (i.e., alleyway) maintained at any time of the year, whether planted cover crops or resident/native vegetation? 8 ⓘ



13. In the vineyards you or your organization manages, is vegetation between vine rows (i.e., alleyway) maintained at any time of the year, whether planted cover crops or resident/native vegetation? 8 ⓘ

Q13 - 13. In the vineyards you or your organization manages, is vegetation between vine rows (i.e., alleyway) maintained at any time of the year, whether planted cover crops or resident/native vegetation?

Percentage

Count

Response	Percentage	Count
Yes	75%	6
No	13%	1
Both	13%	1
Unsure	0%	0

13. In the vineyards you or your organization manages, is vegetation between vine rows (i.e., alleyway) maintained at any time of the year, whether planted cover crops or resident/native vegetation? 8 ⓘ

13. In the vineyards you or your organization manages, is vegetation between...

Average

Minimum

Maximum

Count

Response	Average	Minimum	Maximum	Count
Yes	1.00	1.00	1.00	6

13. In the vineyards you or your organization manages, is vegetation between...	Average	Minimum	Maximum	Count
No	2.00	2.00	2.00	1
Both	3.00	3.00	3.00	1
Unsure	-	-	-	0

Wheat was planted in the alleyway for the first year to control vigor in the vines.

---

Perennial fescue, native grasses and weeds

---

Fawn Tall Fescue Power tetrapid perennial rye Red Clover Rushmore chewings fescue gladiator hard fescue

---

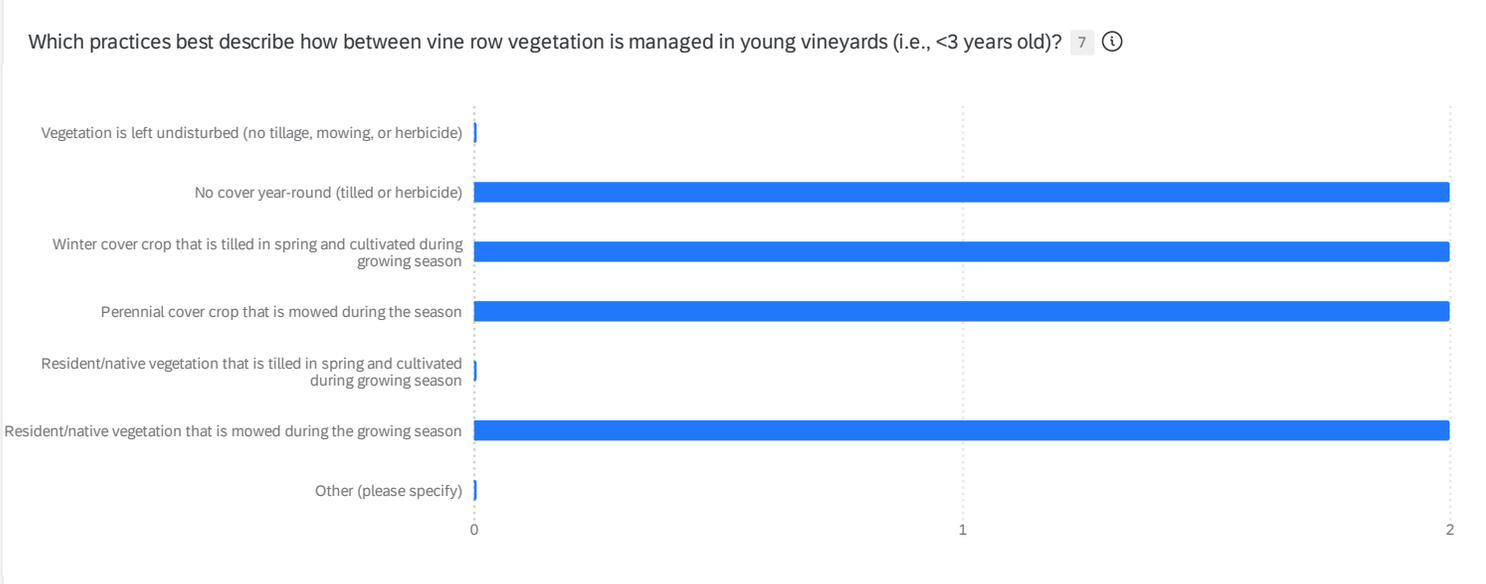
legumes (peas, vetch), cereals (triticale), yellow mustard, canola, fescues

---

Perennial ryegrass; annual ryegrass; cereal rye; perennial native grass mix; resident--mostly prickly lettuce, Russian thistle, Kochia, various grasses

---

Mustard, oats, triticale, crimson clover, bachelor button



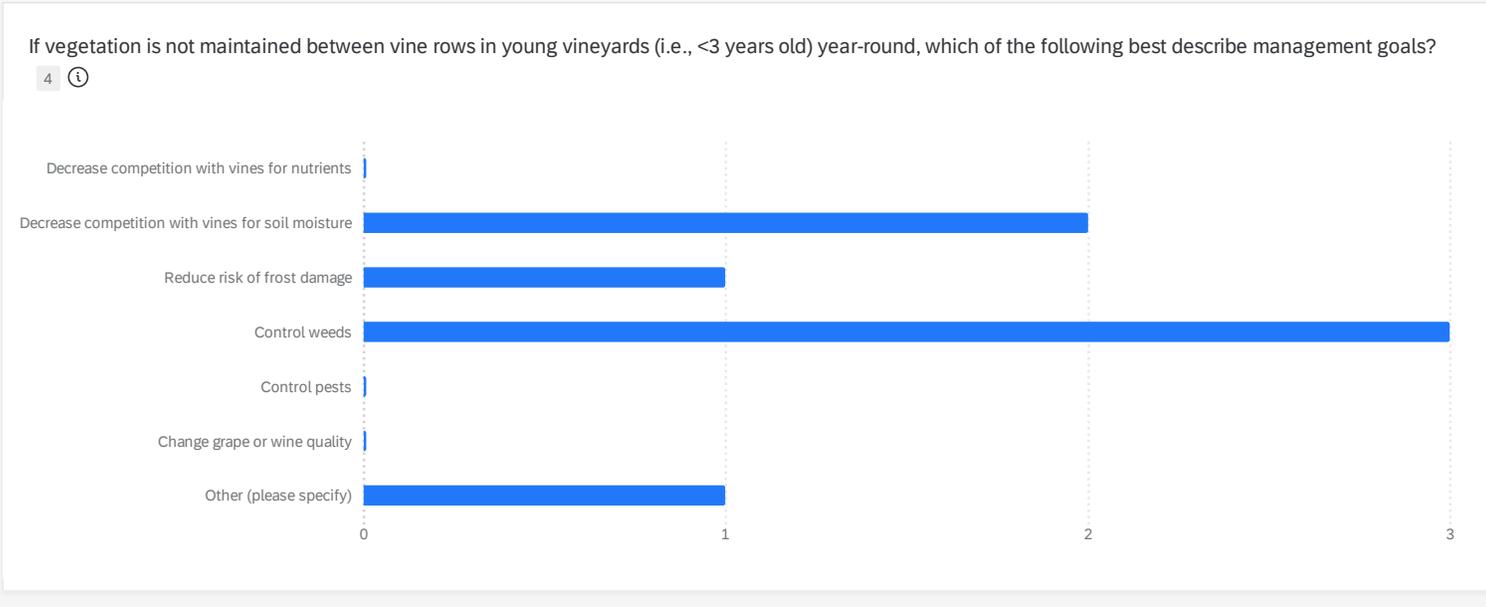
Which practices best describe how between vine row vegetation is managed in young vineyards (i.e., <3 years old)? 7 ⓘ

Q15 - Which practices best describe how between vine row vegetation is managed in young vineyards (i.e., <3 years old)? - Selected Choice	Percentage	Count
Vegetation is left undisturbed (no tillage, mowing, or herbicide)	0%	0
No cover year-round (tilled or herbicide)	29%	2

Q15 - Which practices best describe how between vine row vegetation is managed in young vineyards (i.e., <3 years old)? - Selected Choice	Percentage	Count
Winter cover crop that is tilled in spring and cultivated during growing season	29%	2
Perennial cover crop that is mowed during the season	29%	2
Resident/native vegetation that is tilled in spring and cultivated during growing season	0%	0
Resident/native vegetation that is mowed during the growing season	29%	2
Other (please specify)	0%	0

Which practices best describe how between vine row vegetation is managed in young vineyards (i.e., <3 years old)? Other (please specify) ⓘ

No data found - your filters may be too exclusive!



If vegetation is not maintained between vine rows in young vineyards (i.e., <3 years old) year-round, which of the following best describe management goals?

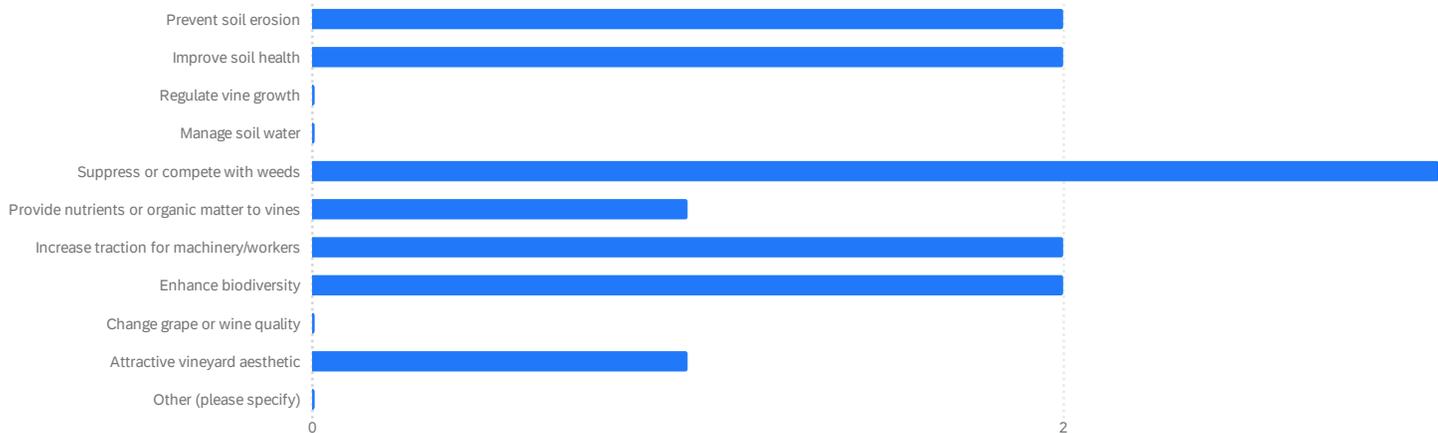
4 ⓘ

Q16 - If vegetation is not maintained between vine rows in young vineyards (i.e., <3 years old) year-round, which of the following best describe management goals? - Selected Choice

	Percentage	Count
Decrease competition with vines for nutrients	0%	0
Decrease competition with vines for soil moisture	50%	2
Reduce risk of frost damage	25%	1
Control weeds	75%	3
Control pests	0%	0
Change grape or wine quality	0%	0
Other (please specify)	25%	1

less PM pressure

If vegetation is maintained year-round between vine rows in young vineyards (<3 years old), which of the following best describe management goals? 3 ⓘ



If vegetation is maintained year-round between vine rows in young vineyards (<3 years old), which of the following best describe management goals? 3 ⓘ

Q17 - If vegetation is maintained year-round between vine rows in young vineyards (<3 years old), which of the following best describe management goals? - Selected Choice

	Percentage	Count
Prevent soil erosion	67%	2
Improve soil health	67%	2
Regulate vine growth	0%	0
Manage soil water	0%	0
Suppress or compete with weeds	100%	3

Q17 - If vegetation is maintained year-round between vine rows in young vineyards (<3 years old), which of the following best describe management goals? - Selected Choice

Percentage

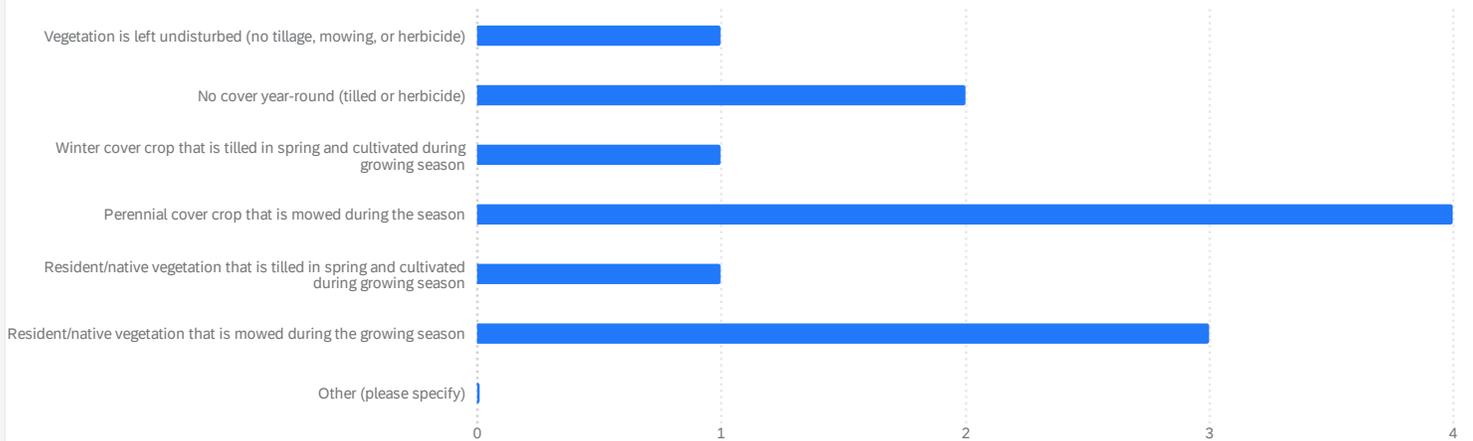
Count

	Percentage	Count
Provide nutrients or organic matter to vines	33%	1
Increase traction for machinery/workers	67%	2
Enhance biodiversity	67%	2
Change grape or wine quality	0%	0
Attractive vineyard aesthetic	33%	1
Other (please specify)	0%	0

If vegetation is maintained year-round between vine rows in young vineyards (<3 years old), which of the following best describe management goals?: Other (please specify) ⓘ

No data found - your filters may be too exclusive!

Which practices best describe how between vine row vegetation is managed in mature vineyards (i.e., >3 years old)? 6 ⓘ



Which practices best describe how between vine row vegetation is managed in mature vineyards (i.e., >3 years old)? 6 ⓘ

Q18 - Which practices best describe how between vine row vegetation is managed in mature vineyards (i.e., >3 years old)? - Selected Choice

Percentage

Count

	Percentage	Count
Vegetation is left undisturbed (no tillage, mowing, or herbicide)	17%	1

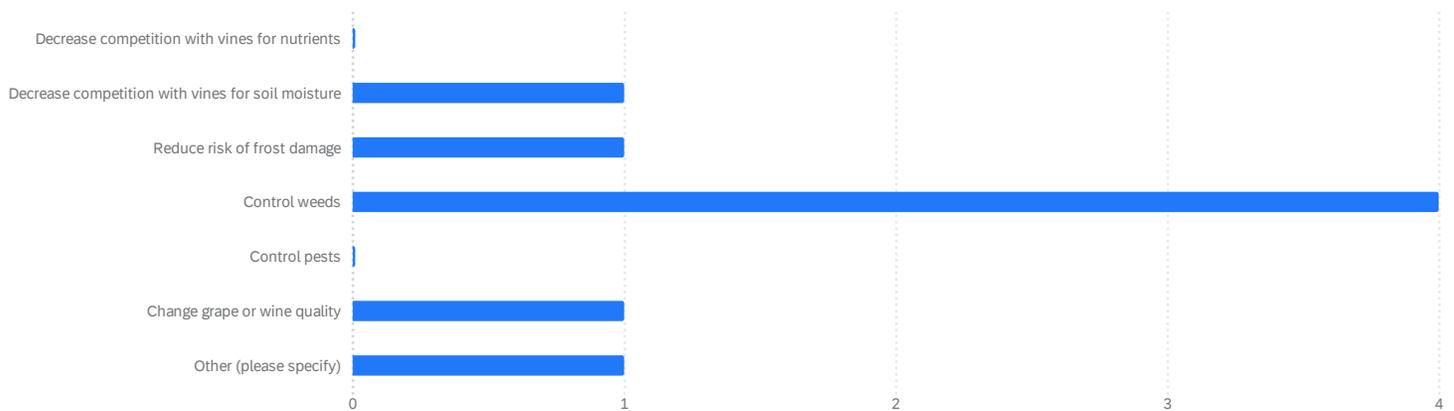
Q18 - Which practices best describe how between vine row vegetation is managed in mature vineyards (i.e., >3 years old)? - Selected Choice	Percentage	Count
No cover year-round (tilled or herbicide)	33%	2
Winter cover crop that is tilled in spring and cultivated during growing season	17%	1
Perennial cover crop that is mowed during the season	67%	4
Resident/native vegetation that is tilled in spring and cultivated during growing season	17%	1
Resident/native vegetation that is mowed during the growing season	50%	3
Other (please specify)	0%	0

Which practices best describe how between vine row vegetation is managed in mature vineyards (i.e., >3 years old)? Other (please specify) ⓘ

No data found - your filters may be too exclusive!

If vegetation is not maintained between vine rows in mature vineyards (i.e., >3 years old) year-round, which of the following best describe management goals? ⓘ

4 ⓘ



If vegetation is not maintained between vine rows in mature vineyards (i.e., >3 years old) year-round, which of the following best describe management goals?

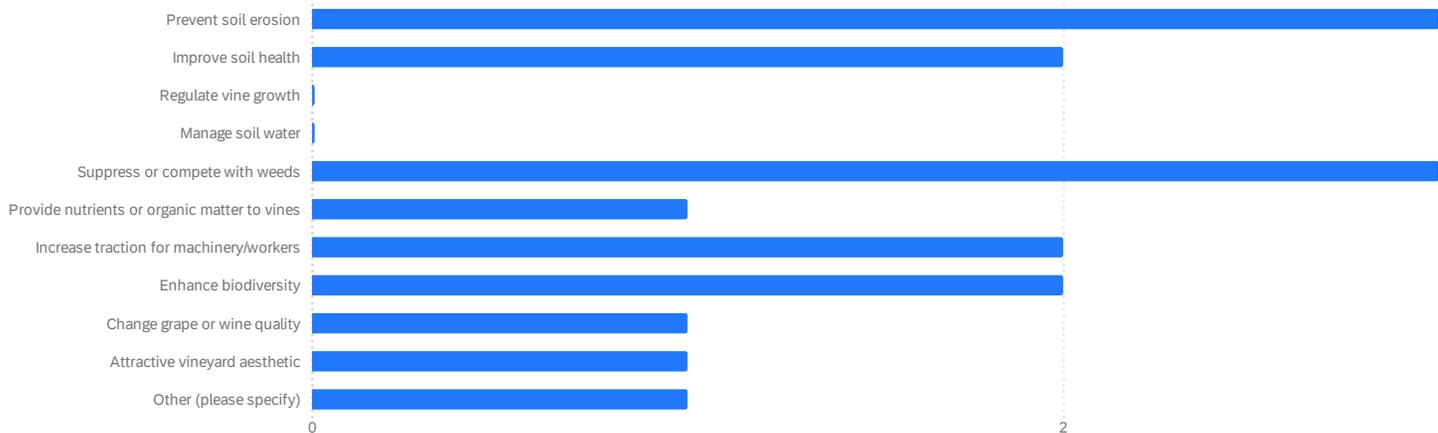
4 ⓘ

Q21 - If vegetation is not maintained between vine rows in mature vineyards (i.e., >3 years old) year-round, which of the following best describe management goals? - Selected Choice

	Percentage	Count
Decrease competition with vines for nutrients	0%	0
Decrease competition with vines for soil moisture	25%	1
Reduce risk of frost damage	25%	1
Control weeds	100%	4
Control pests	0%	0
Change grape or wine quality	25%	1
Other (please specify)	25%	1

Less PM pressure

If vegetation is maintained year-round between vine rows in young vineyards, which of the following best describe management goals? 4 ⓘ



If vegetation is maintained year-round between vine rows in young vineyards, which of the following best describe management goals? 4 ⓘ

Q22 - If vegetation is maintained year-round between vine rows in young vineyards, which of the following best describe management goals? - Selected Choice

	Percentage	Count
Prevent soil erosion	75%	3
Improve soil health	50%	2
Regulate vine growth	0%	0
Manage soil water	0%	0
Suppress or compete with weeds	75%	3

Q22 - If vegetation is maintained year-round between vine rows in young vineyards, which of the following best describe management goals? - Selected Choice

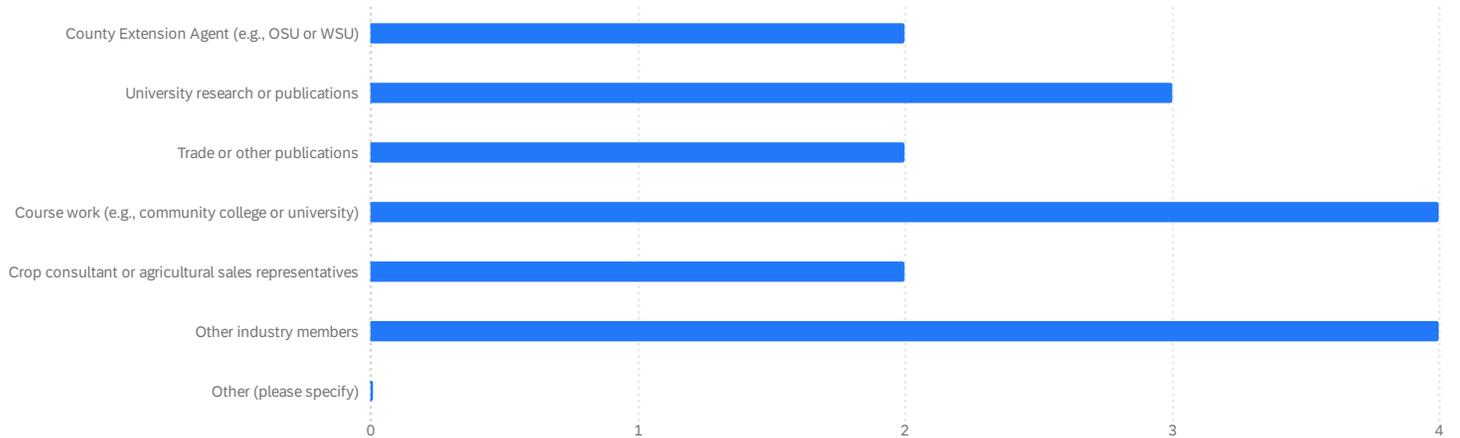
Percentage

Count

	Percentage	Count
Provide nutrients or organic matter to vines	25%	1
Increase traction for machinery/workers	50%	2
Enhance biodiversity	50%	2
Change grape or wine quality	25%	1
Attractive vineyard aesthetic	25%	1
Other (please specify)	25%	1

mitigate heat

Where have you obtained most of your information about vineyard cover crop or weed management practices? 7 ⓘ



Where have you obtained most of your information about vineyard cover crop or weed management practices? 7 ⓘ

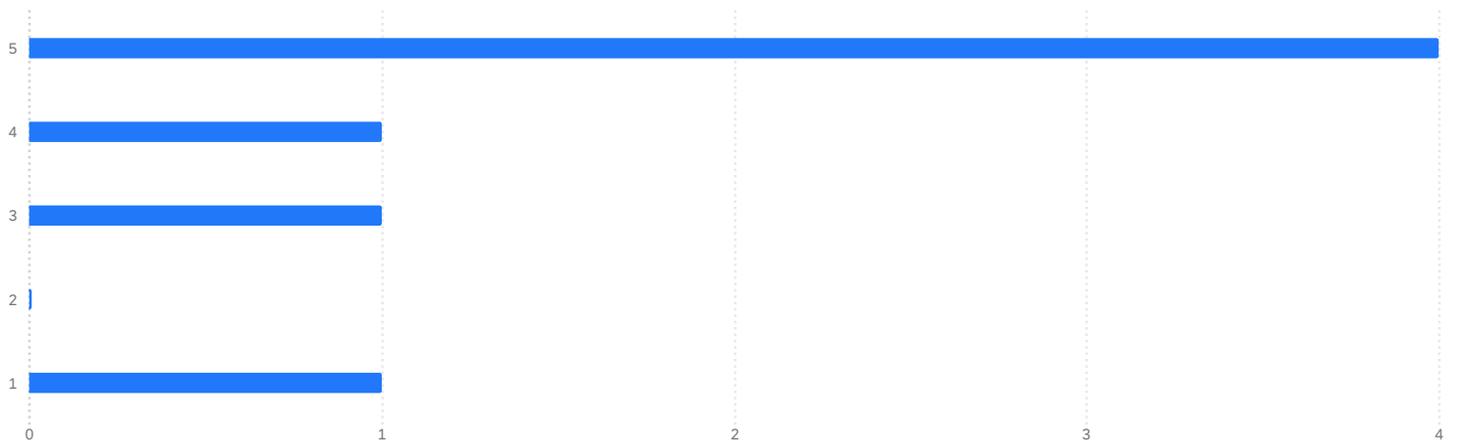
Q21 - Where have you obtained most of your information about vineyard cover crop or weed management practices? - Selected Choice

	Percentage	Count
County Extension Agent (e.g., OSU or WSU)	29%	2
University research or publications	43%	3
Trade or other publications	29%	2
Course work (e.g., community college or university)	57%	4
Crop consultant or agricultural sales representatives	29%	2
Other industry members	57%	4
Other (please specify)	0%	0

Where have you obtained most of your information about vineyard cover crop or weed management practices?: Other (please specify) ⓘ

No data found - your filters may be too exclusive!

Rate your interest in learning more about vineyard cover crops from 1 to 5 (1 = not interested, 5 = very interested). 7 ⓘ



Rate your interest in learning more about vineyard cover crops from 1 to 5 (1 = not interested, 5 = very interested). 7 ⓘ

Q22 - Rate your interest in learning more about vineyard cover crops from 1 to 5 (1 = not interested, 5 = very interested).

	Percentage	Count
5	57%	4
4	14%	1
3	14%	1
2	0%	0
1	14%	1

Rate your interest in learning more about vineyard cover crops from 1 to 5 (1 = not interested, 5 = very interested). 7 ⓘ

Rate your interest in learning more about vineyard cover crops from 1 to 5...

	Average	Minimum	Maximum	Count
5	1.00	1.00	1.00	4
4	2.00	2.00	2.00	1
3	3.00	3.00	3.00	1
2	-	-	-	0
1	5.00	5.00	5.00	1

I am interested in cutting back on the number of cultivation passes through the vineyard, also a low-lying non-competitive undervine cover crop would be ideal. I am not sure if I can get my boss on board with having a cover crop though, due to the fact that the "Rocks" are his claim to fame. Worth a shot though!

We just need more information on suitable cover crops for alleyway management pre-plant, young vineyards, and mature vineyards. I feel as though we are groping around for what works in our climate