As crops are harvested, the soil can become depleted of vital nutrients. Find out how much you should be replacing.

### Nutrient Removal Calculator

<table>
<thead>
<tr>
<th>UNITs:</th>
<th>Imperial</th>
<th>Metric</th>
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</table>

1. **Choose Your Crop:**
   - Soybean
   - Corn
   - Wheat

2. **Yield:** Enter #

3. **Include Economic Impact:**
   - Include

4. **N Source:** Select Source

5. **N Cost:** Enter # $/ton

6. **P Source:** Select Source

7. **P Cost:** Enter # $/ton

8. **K Source:** Select Source

9. **K Cost:** Enter # $/ton

[Calculate]
Learning How To Use This Tool
If you don’t know the current nutrient prices in your area, consult your local retail agronomist.

1) Crop selector:
We have assembled crop removal data for a large number of crops from scientific publications from around the world.

Economic impact button:
If you would like to know the value of the crop nutrients being removed, click this feature on. By doing so, you will be asked to select fertilizer sources and costs.

4) N cost:
Enter a cost for that product, you can use a reported value or a local value.

6) P cost:
Enter a cost for that product, you can use a reported value or a local value.

6) K cost:
Enter a cost for that product, you can use a reported value or a local value.

2) Yield:
Enter a potential yield based upon previous experience or what your crop actually yielded.

3) N source selector:
Select an N source that you are likely to use to fertilize your next crop.

5) P source selector:
Select a P source that you are likely to use to fertilize your next crop.

7) K source selector:
Select a K source that you are likely to use to fertilize your next crop.

Unit Selection:
Your unit preference will allow you to enter crop yields and nutrient costs in units native to either the imperial or metric systems.
You can show the impact of crop removal on soil test level using the following general rules of thumb.

- For every 20 pounds of P removed without fertilization soil test level will decrease by 1 ppm.
- For every 6 pounds of K removed without fertilization soil test level will decrease by 1 ppm.
- Incorporating these general rules of thumb can aid your discussion by showing a user that skipping fertilization will decrease soil test level for subsequent crops.
Going Beyond The Basics
Going Beyond the Basics

Scenario 1

We are providing two scenarios to demonstrate how the Nutrient Removal Calculator works.
Click “Calculate”.

The results reveal that 285 pounds of N was removed with a value of $0 (because legumes replace their own nitrogen naturally, no dollar amount will be attributed to the nitrogen’s removal), 63 lbs of $P_2O_5$/acre were removed with a value of $29.03, and 98 lbs of $K_2O$/acre were removed with a value of $44.69.

How will this theoretically impact subsequent soil test levels?

Soil test P level would decrease by 3 ppm and soil test K level would decrease by 16 ppm (remember the rules of thumb).
Going Beyond the Basics

Scenario 2

We are providing two scenarios to demonstrate how the Nutrient Removal Calculator works.
Click “Calculate”.

The results reveal that 120 lbs/acre of N was removed with a value of $58.70. With straw, 176 lbs/acre of N was removed with a value of $86.09.

48 lbs/acre of $P_2O_5$ was removed with a value of $22.12. With straw, 61 lbs/acre of $P_2O_5$ was removed with a value of $28.02.

27 lbs/acre of $K_2O$ was removed with a value of $12.47. With straw, 120 lbs/acre of $K_2O$ was removed with a value of $55.00.

How will this theoretically impact subsequent soil test levels?

If only grain was removed, soil test P level would decrease by 2.5 ppm and soil test K level would decrease by 4 ppm (remember the rules of thumb).

If grain and straw were removed, soil test P level would decrease by 3 ppm and soil test K level would decrease by 20 ppm.