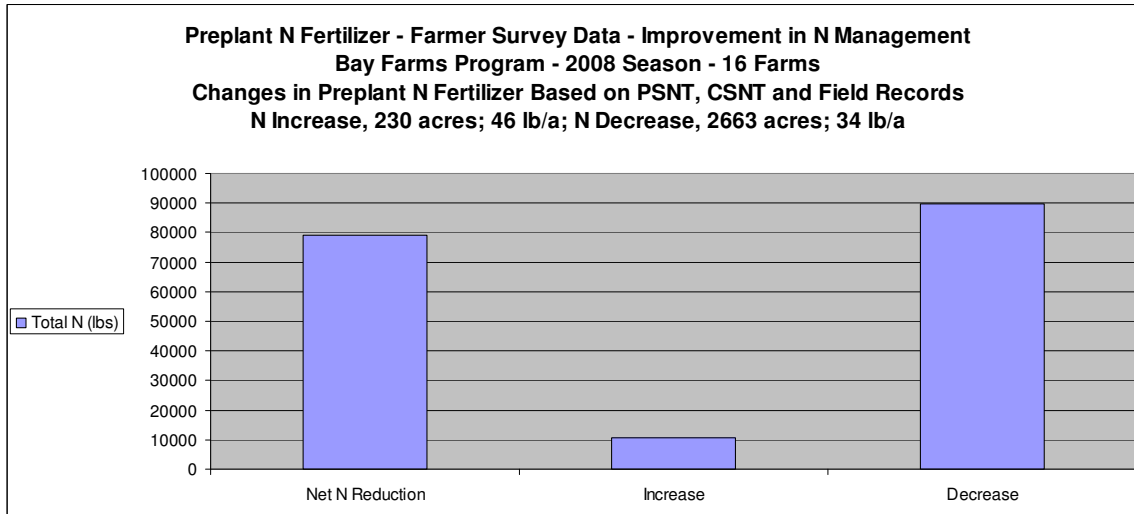


Improvements in Nitrogen Management in the Bay Farms Program - 2008

Pre-plant N fertilizer



Farmers in the Bay Farms program made substantial changes to their pre-plant N management by using the results of the PSNT, the CSNT and discussions about the results with the Bay Farms team and other farmers.

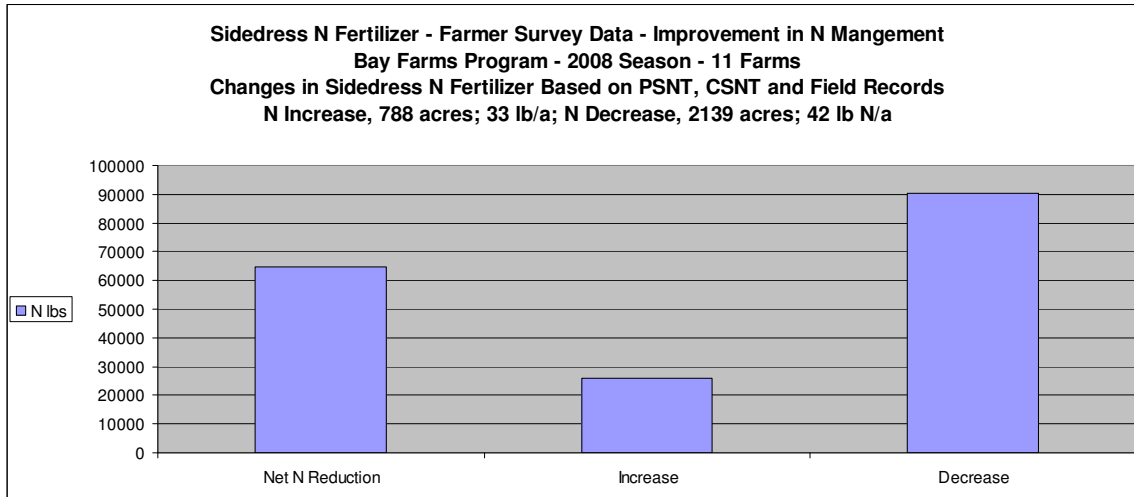
The farmers increased their pre-plant N rates on a small number of acres based on 2-3 years of results from the PSNT and the CSNT showing more N was needed on a few fields. Most of the increases occurred in the corn silage/rye silage rotation, which is a rotation that seems to require more N than is currently recommended. The farmers make much more profit from applications of N to fields where N is limiting yield compared with reductions of N on fields where N is in excess.

The farmers decreased their pre-plant N rates on a substantial number of acres. The farmers developed confidence that they could reduce N rates with minimal risk because of discussions about how to improve N management by using the results of the PSNT and the CSNT.

Net N reduction is an imperfect and, in some cases, misleading measure of N use efficiency. We need another way to discuss improvements in N management from previously unavailable information, that is, information from the PSNT and the CSNT. The increases in N should be considered an improved N practice because the increased N was applied based on new information about the N status of corn fields that indicated a need for the increased N. Nitrogen deficient corn is not the most efficient use of a farm's resources. The land is not used to its full potential and the other inputs to grow the corn, diesel fuel, P and K fertilizer, labor, etc., are not used efficiently if N is deficient.

Improvements in Nitrogen Management in the Bay Farms Program - 2008

Sidedress N fertilizer



Farmers in the Bay Farms program made substantial changes to their sidedress N management by using the results of the PSNT, the CSNT and discussions about the results with the Bay Farms team and other farmers.

The farmers increased their sidedress N rates on a small number of acres (788) based on the results from the PSNT and the CSNT showing more N was needed on some fields. Most of the increases in N were the result of farmers following the recommendations from the PSNT. The farmers make much more profit from applications of N to fields where N is limiting yield compared with reductions of N on fields where N is in excess.

The farmers decreased their sidedress N rates on a substantial number of acres (2139). The farmers developed confidence that they could reduce N rates with minimal risk because of discussions about how to improve N management by using the results of the PSNT and the CSNT.

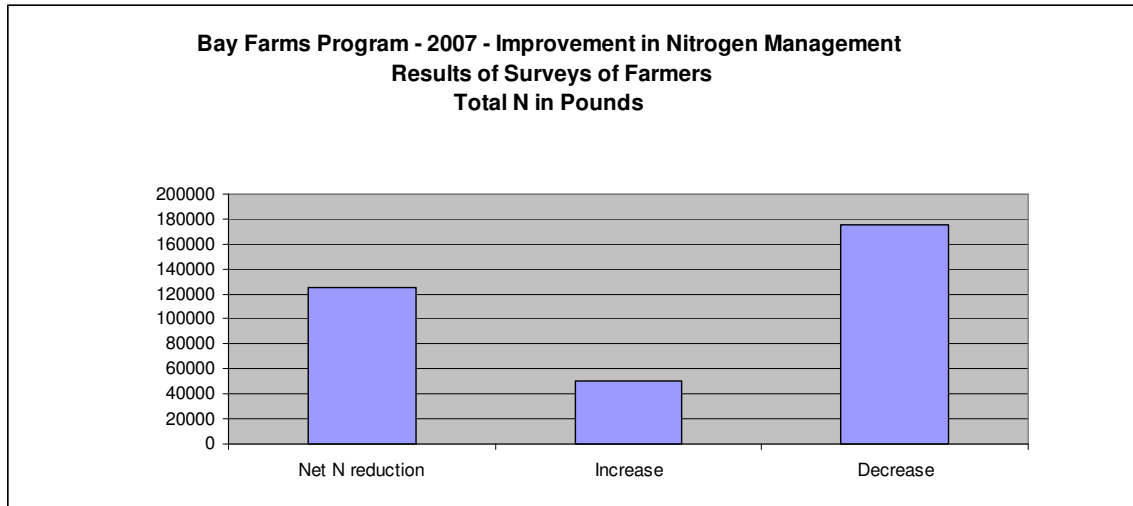
Net N reduction is an imperfect and, in some cases, misleading measure of N use efficiency. We need another way to discuss improvements in N management from previously unavailable information, that is, information from the PSNT and the CSNT. The increases in N should be considered an improved N practice because the increased N was applied based on new information about the N status of corn fields that indicated a need for the increased N. Nitrogen deficient corn is not the most efficient use of a farm's resources. The land is not used to its full potential and the other inputs to grow the corn, diesel fuel, P and K fertilizer, labor, etc., are not used efficiently if N is deficient.

Improvements in Nitrogen Management in the Bay Farms Program - 2007

The average decrease in N was 45 pounds per acre on 3,890 acres.

The average increase in N was 58 pounds per acre on 860 acres.

The net change in N was a reduction of 27 pounds per acre on 4,750 acres.



Net N reduction is an imperfect and, in some cases, misleading measure of N use efficiency. We need another way to discuss improvements in N management from previously unavailable information, that is, information from the PSNT and the CSNT. The increases in N should be considered an improved N practice because the increased N was applied based on new information about the N status of corn fields that indicated a need for the increased N. Nitrogen deficient corn is not the most efficient use of a farm's resources. The land is not used to its full potential and the other inputs to grow the corn, diesel fuel, P and K fertilizer, labor, etc., are not used efficiently if N is deficient.