## NITRIFICATION vs DENITRIFICATION

## Conversion of nitrogen containing Nitrification Materials to a plant useable form **TURF SUPREME** Nitrite and nitrate-forming Ammonium Phosphate bacteria and oxygen Ammonium Sulfate Nitrite in ammonium nitrate calcium nitrate Urea Manure NH<sub>3</sub> NO<sub>2</sub> oxygen Decomposing ammonia nitrite plant residues (can be volatile) NO3-NH<sub>4</sub>+ nitrate ammonia (moves with water, can leach) These steps do not require These steps require oxygen and take place even in a very wet soil hence a nitrogen deficiency oxygen and so can take ofter show in wet areas. place even in very wet soil.

## Denitrification

## Loss of plant useable Nitrogen to the atmosphere



