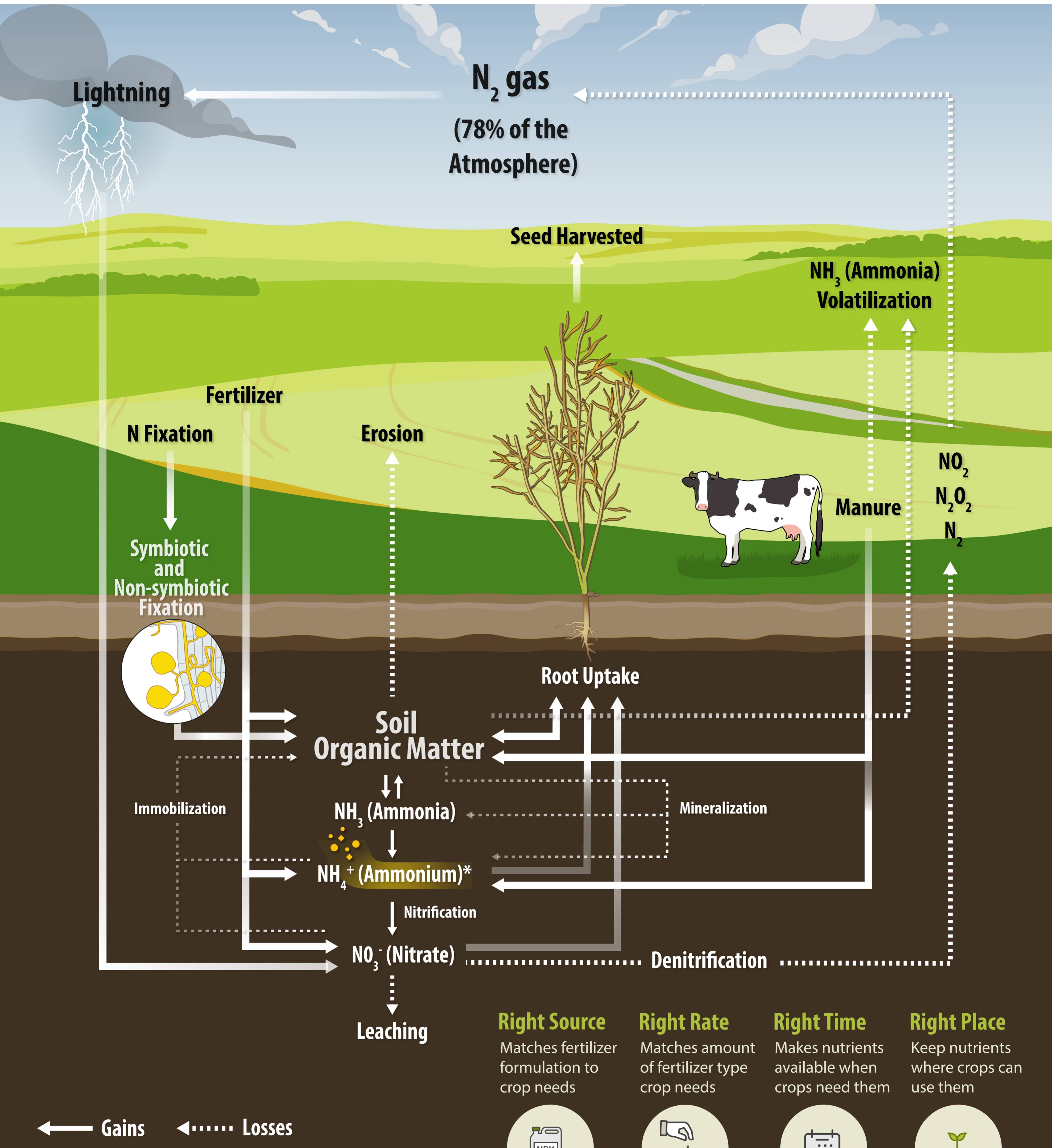


Nitrogen Cycle

← Gains ← Losses



← Gains ← Losses

*Factors conducive to NH₃ formation, volatilization and toxicity:

Chemical Composition of Soil

- High pH
- High concentration of CaCO₃

Weathering Conditions

- High temperatures increase reaction rates and soil drying, concentration of NH₄⁺ and NH₃
- Optimum moisture content for dissolving fertilizer

Other Conditions Conducive to Volatilization Losses

- High wind velocity
- Soil quality allowing rapid air exchange (Sandy, lumpy soil or porous soil)
- Fertilizer, manure or legume residue left at or near soil surfaces