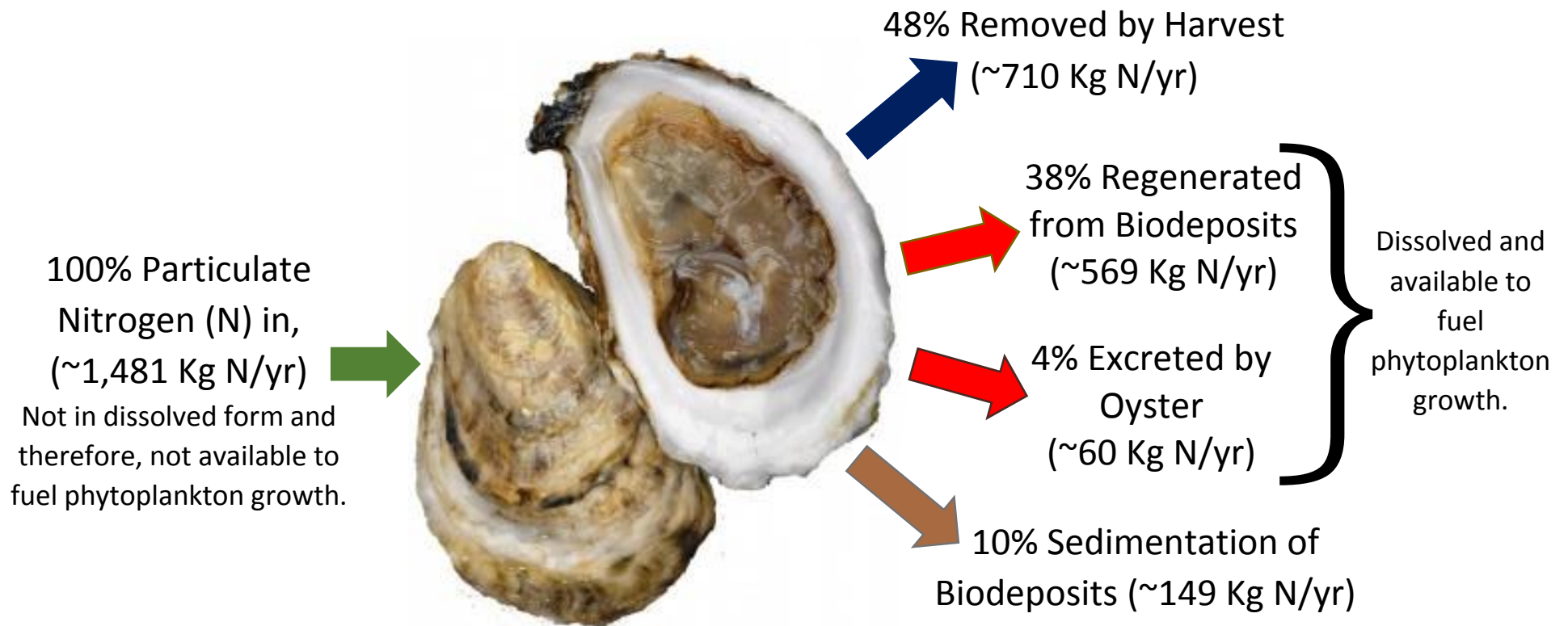


The Effect of Oyster Aquaculture on the Nitrogen Cycle in the Western Basin of Ninigret Pond



Bottom line: The nitrogen that is taken in by an oyster is in a form that is not usable for phytoplankton growth; it is bound in a particulate form (phytoplankton, inorganic and organic seston). About 48% of this nitrogen is permanently removed from the pond ecosystem when the oyster is harvested. However, 42% of the nitrogen that an oyster takes in is ultimately released back into the environment in a form that is readily used for phytoplankton growth. Whether the phytoplankton growth fueled by this returned nitrogen offsets the phytoplankton removed by the oyster is unknown.