Supabase Schema Overview

This document provides a simplified overview of the cattle management database schema. It is intended for someone setting up the database in Supabase without needing access to the original Microsoft Access file.

Purpose of the Database

The database is designed to track cattle groups, where cattle are physically housed (pens), how cattle groups are distributed across pens, and financial hedge positions associated with those cattle groups.

Core Tables

- **cattle_groups** – The primary business object. One record per cattle purchase or ownership group.
- **pens** – Physical pens on the yard, including capacity-related attributes.
- **groups_by_pen** – Join table showing how many head from each group are located in each pen.
- **hedging** – Financial hedge positions tied to cattle groups.

How the Tables Relate

• A single cattle group can be split across multiple pens.
• A single pen can hold cattle from multiple groups.
• Hedge records always belong to a single cattle group.

These relationships are enforced using foreign keys in Supabase.

Design Principles Used

- UUIDs are used as primary keys to avoid collisions and simplify syncing.
- snake_case field names are used to match PostgreSQL conventions.
- Foreign keys enforce data integrity instead of relying on naming conventions.
- Calculated values are stored only if they are needed for reporting or history.

What This Schema Does Not Do

This schema intentionally does not include: • Feeding or ration tables • Daily performance tracking • Closeout or accounting journal entries Those can be layered on later without changing the core structure.