-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

DROP SCHEMA IF EXISTS 4est ;

CREATE SCHEMA IF NOT EXISTS 4est DEFAULT CHARACTER SET utf8 ;

USE 4est ;

DROP TABLE IF EXISTS 4est.Location\_has\_Plant\_Species ;

DROP TABLE IF EXISTS 4est.Entry ;

DROP TABLE IF EXISTS 4est.Location ;

DROP TABLE IF EXISTS 4est.Plant\_Species ;

DROP TABLE IF EXISTS 4est.Moment ;

CREATE TABLE Moment (

DTG TIMESTAMP NOT NULL,

Season VARCHAR(45) NOT NULL,

Plant\_Growth\_Phase VARCHAR(45) NOT NULL,

Weather VARCHAR(45) NOT NULL,

PRIMARY KEY (DTG)

);

CREATE TABLE Plant\_Species (

Plant\_Latin\_Name VARCHAR(100) NOT NULL,

Plant\_Common\_Name VARCHAR(50) NOT NULL,

Plant\_Phylum VARCHAR(45) NOT NULL,

Toxic TINYINT NOT NULL,

Edible TINYINT NOT NULL,

Medicinal TINYINT NOT NULL,

Plant\_Description LONGTEXT NOT NULL,

PRIMARY KEY (Plant\_Latin\_Name)

);

CREATE TABLE Location (

Location\_Name VARCHAR(60) NOT NULL,

Geography VARCHAR(45) NOT NULL,

Vegetative\_Zone VARCHAR(45) NOT NULL,

Growing\_Zone VARCHAR(10) NULL,

Elevation INT NULL,

Location\_Notes LONGTEXT NOT NULL,

PRIMARY KEY (Location\_Name)

);

CREATE TABLE Entry (

Entry\_Number INT AUTO\_INCREMENT NOT NULL,

Body\_Trunk\_Stem\_Description LONGTEXT NULL,

Branch\_Leaf\_Pattern\_Description LONGTEXT NULL,

Flower\_Fruit\_Description LONGTEXT NULL,

Notes LONGTEXT NOT NULL,

Location\_Name VARCHAR(60) NOT NULL,

Plant\_Latin\_Name VARCHAR(100) NOT NULL,

DTG TIMESTAMP NOT NULL,

PRIMARY KEY (Entry\_Number, DTG),

FOREIGN KEY (Location\_Name) REFERENCES Location (Location\_Name) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (Plant\_Latin\_Name) REFERENCES Plant (Plant\_Latin\_Name) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (DTG) REFERENCES Moment (DTG) ON DELETE CASCADE ON UPDATE CASCADE

);

CREATE TABLE Location\_has\_Plant\_Species (

Location\_Name VARCHAR(60) NOT NULL,

Plant\_Latin\_Name VARCHAR(100) NOT NULL,

FOREIGN KEY (Location\_Name) REFERENCES Location (Location\_Name) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (Plant\_Latin\_Name) REFERENCES Plant\_Species (Plant\_Latin\_Name) ON DELETE CASCADE ON UPDATE CASCADE,

UNIQUE KEY (Location\_Name, Plant\_Latin\_Name)

);

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;