Kansas Milky Way Photography Checklist

1. Pre-Trip Planning

- ☐ Build plan in PhotoPills or PlanIt Pro
- ☐ Check New Moon dates for your target month
- ☐ Verify Milky Way visibility window
  - March: 3:30–5:00 AM
  - April: 1:30–4:15 AM
  - May: 11:30 PM–3:30 AM
  - June: 10:15 PM–3:15 AM
  - July: 10:00 PM–2:45 AM
  - August: 9:30 PM–Midnight
  - September: 8:45–10:15 PM
- ☐ Choose composition style
  - Pano Arch (April–May)
  - Vertical Core (June–August)
- ☐ Check weather (cloud cover, humidity, wind)
- ☐ Check light pollution map for your location
- ☐ Download offline maps (Google Maps or Gaia GPS)
- ☐ Scout foreground options during daylight
- ☐ Confirm access/road conditions (especially Flint Hills gravel roads)

2. Essential Camera Gear

- ☐ Camera body (full-frame preferred)
- ☐ Wide-angle lens (14–24mm, f/1.4–f/2.8)
- ☐ Fast prime lens for vertical core (20mm or 24mm f/1.4)
- ☐ Tripod (sturdy, no center column wobble)
- ☐ Leveling Base (for multi-exposure Pano)
- ☐ Indexing Rotator (for multi-exposure Pano)
- ☐ Extra batteries (fully charged)
- ☐ Memory cards (formatted, high-capacity)
- ☐ Lens cloth + blower
- ☐ Dew heater or hand warmers + rubber bands
- ☐ Intervalometer or built-in timer
- ☐ Star tracker (optional for deep-space detail)

3. Field Essentials

- ☐ Red-light headlamp
- ☐ Warm layers (even summer nights can drop fast)
- ☐ Gloves + hat (spring and fall)
- ☐ Bug spray (Flint Hills + reservoirs)
- ☐ Water + snacks
- ☐ Portable power bank
- ☐ Folding stool or ground pad
- ☐ Phone mount for sky apps
- ☐ Emergency kit (first aid, multitool, whistle)

4. Shooting Workflow

- ☐ Arrive 45–60 minutes before astronomical darkness
- ☐ Identify foreground alignment with core direction
  - Spring: ESE → S
  - Summer: S → SW
  - Autumn: SW → WSW
- ☐ Level tripod and lock legs
- ☐ Set camera to manual mode
- ☐ Recommended starting settings:
  - ISO 3200–6400
  - f/1.4–2.8
  - 10–20 seconds (depending on focal length)
- ☐ Focus using live view on a bright star
- ☐ Shoot test frames and adjust composition
- ☐ Capture foreground exposures (low ISO, longer shutter)
- ☐ Capture sky exposures (high ISO, short shutter)
- ☐ Shoot pano rows if needed (April–May)
- ☐ Shoot tracked exposures if using a star tracker

5. Safety Checklist

- ☐ Tell someone your location and return time
- ☐ Keep phone charged + offline maps ready
- ☐ Watch for wildlife (cattle, coyotes, snakes)
- ☐ Avoid standing near cliff edges (Monument Rocks, Castle Rock)
- ☐ Respect private property and posted signs
- ☐ Carry a backup light source
- ☐ Keep gear bags zipped to avoid insects

6. Post-Shoot Tasks

- ☐ Back up images immediately
- ☐ Clean lenses and camera body
- ☐ Review compositions for future scouting
- ☐ Note sky conditions for next trip
- ☐ Update your Kansas Milky Way calendar

7. Kansas Location Quick Reference

- ☐ Teter Rock — Flint Hills
- ☐ El Dorado Lake Ghost Forest — Flint Hills
- ☐ Tallgrass Prairie National Preserve
- ☐ Monument Rocks — Western Badlands
- ☐ Castle Rock — Western Badlands
- ☐ Lake Scott State Park — Bortle 2
- ☐ Mushroom Rock State Park — Smoky Hills
- ☐ Kanopolis State Park — Smoky Hills