During a Drought Year
Production Decisions
Wisconsin
Irrigated Potato

Crop Phenology

Outcome Observed
Drought Concerns
Management Decisions
Crop Phenology

Sprout development
- Inspect wells & irrigation nozzles. Plan ahead to rehab & repair as needed, especially if water demand is going to be high.
- Plant potato seeds. Weed control.

Vegetative growth
- Hot & dry conditions during emergence may damage plants. Alternating periods of wet & dry increase risk of early blight.
- Dry conditions increase leaf spot, powdery mildew, plant & increasing risk of seed set.
- Dry conditions may occur & plants may be killed due to soil temperature & high wind. Irrigate to keep seeds hydrated. Begin fertilizing & pest control.
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Tuber set
- High daily ET rates may exceed capacity of irrigation system. Decreasing yield. Dry yield decreases risk of late blight. Tuber bulking increases risk of late blight. Monitor ET & adjust irrigation (if spring ET is < 80% normal).
- Tuber bulking
- Summer irrigation will be important. Monitor ET & adjust irrigation (if spring ET is < 80% normal).

Tuber bulking
- Low moisture demand by crop. Least moisture demand by crop.
- Late July - Tuber bulking
- Terminates vine growth, harvest crop.

Maturation
- July - Maturation
- Lower ET demands for cover crops reduce need for irrigation in late summer.

Management Decisions
- June - Plant cover crops.
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Drought Concerns
- Wind erosion is a concern if cover crops did not overwinter.
- Pest & disease damage.
- High & dry conditions during emergence may damage plants. Alternating periods of wet & dry increase risk of early blight.
- Wind erosion is a concern if cover crops did not overwinter.

Outcome Observed
- Soil moisture recharge.
- Moisture is necessary for cover crop establishment & survival into the winter.
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Crop Phenology
- January - Moisture recharge
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Drought Concerns
- Crop phenology
- Flooded fields.
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Management Decisions
- December - Cover crop failure.
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Outcome Observed
- January - Inspect wells & irrigation nozzles. Plan ahead to rehab & repair as needed, especially if water demand is going to be high.
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Drought Concerns
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Management Decisions
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Outcome Observed
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