

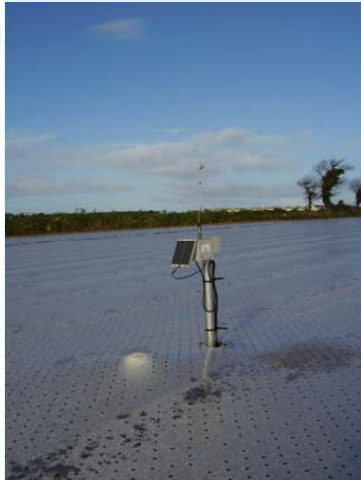
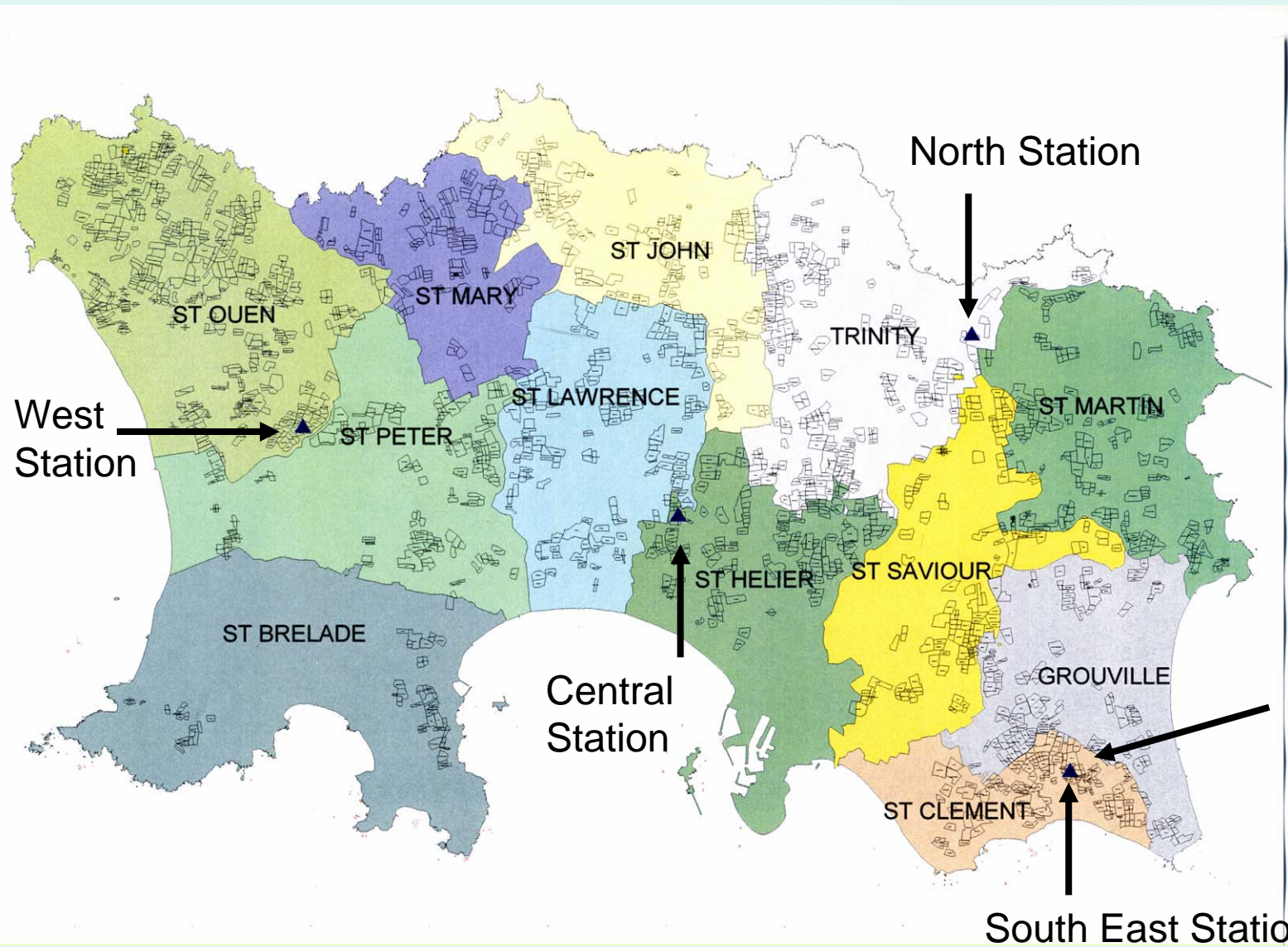
# Assessing Late Blight Risk Under Polythene Covers in Jersey



Howard Hinds Crop Consultancy

# Background

- Jersey Royal (Potato Marketing)
- 1800 ha Jersey Royal potatoes
- Maritime climate – high blight risk
- Most crop covered by polythene
- Potatoes after potatoes
- A1 still main strain, but seed/volunteers a problem
- Plant-Plus model since 2000
- 4 weather stations on the island
- Blight mapping



← 15 km →

# Why Assess Risk Under Poly?

- Test the assumption that blight risk under polythene is always high.
- Compare risk calculated from under polythene data against open ground weather conditions
- Produce improved DSS for blight protection of early crops by improved timing of polythene removal



# Poly Station South East

February  
2006

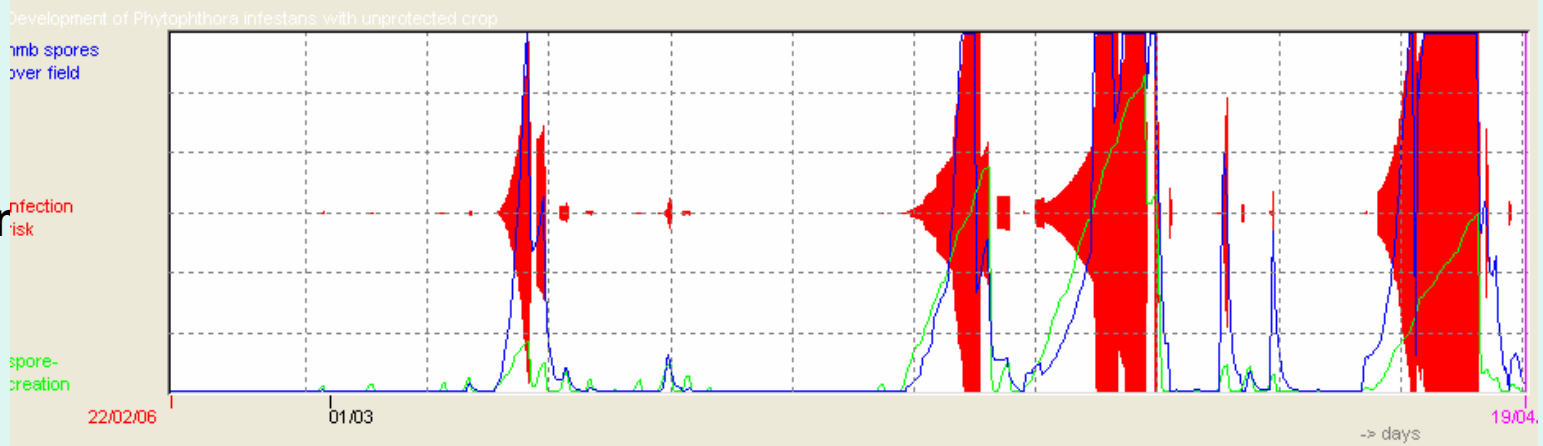


# 2006 polythene removal

## April 10th



# South East Blight Risk 2006 – a late season

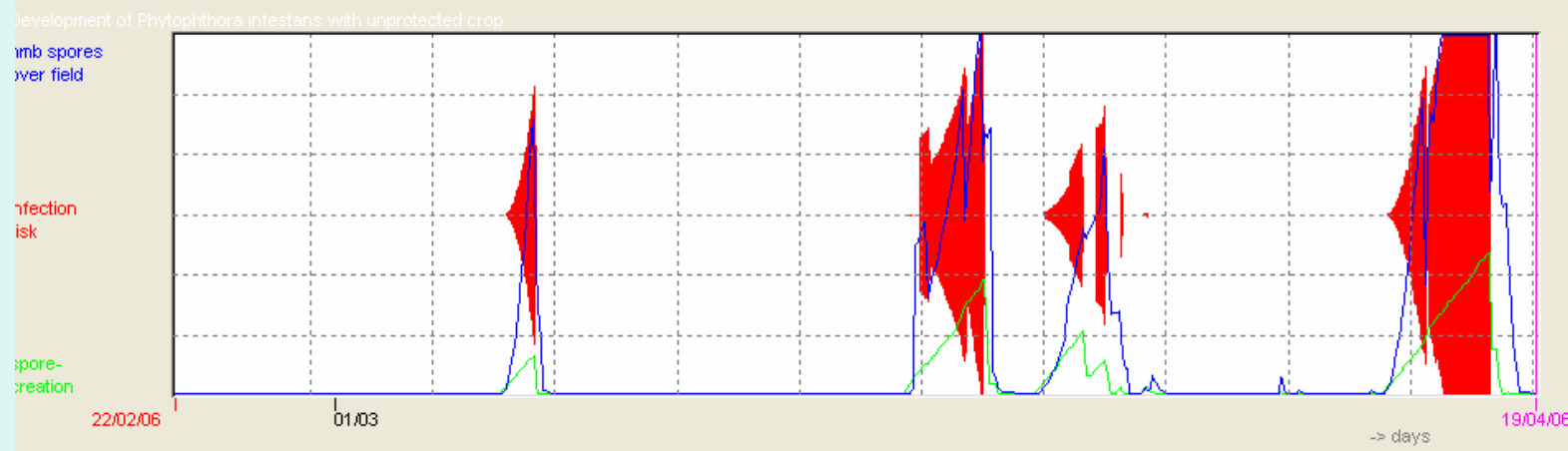


**Poly station**

**Emergence 22/02/06**

**24/3 3/4**

**Poly removal 10/04/06**



**Open field station**



# Poly Station South East

February  
2007

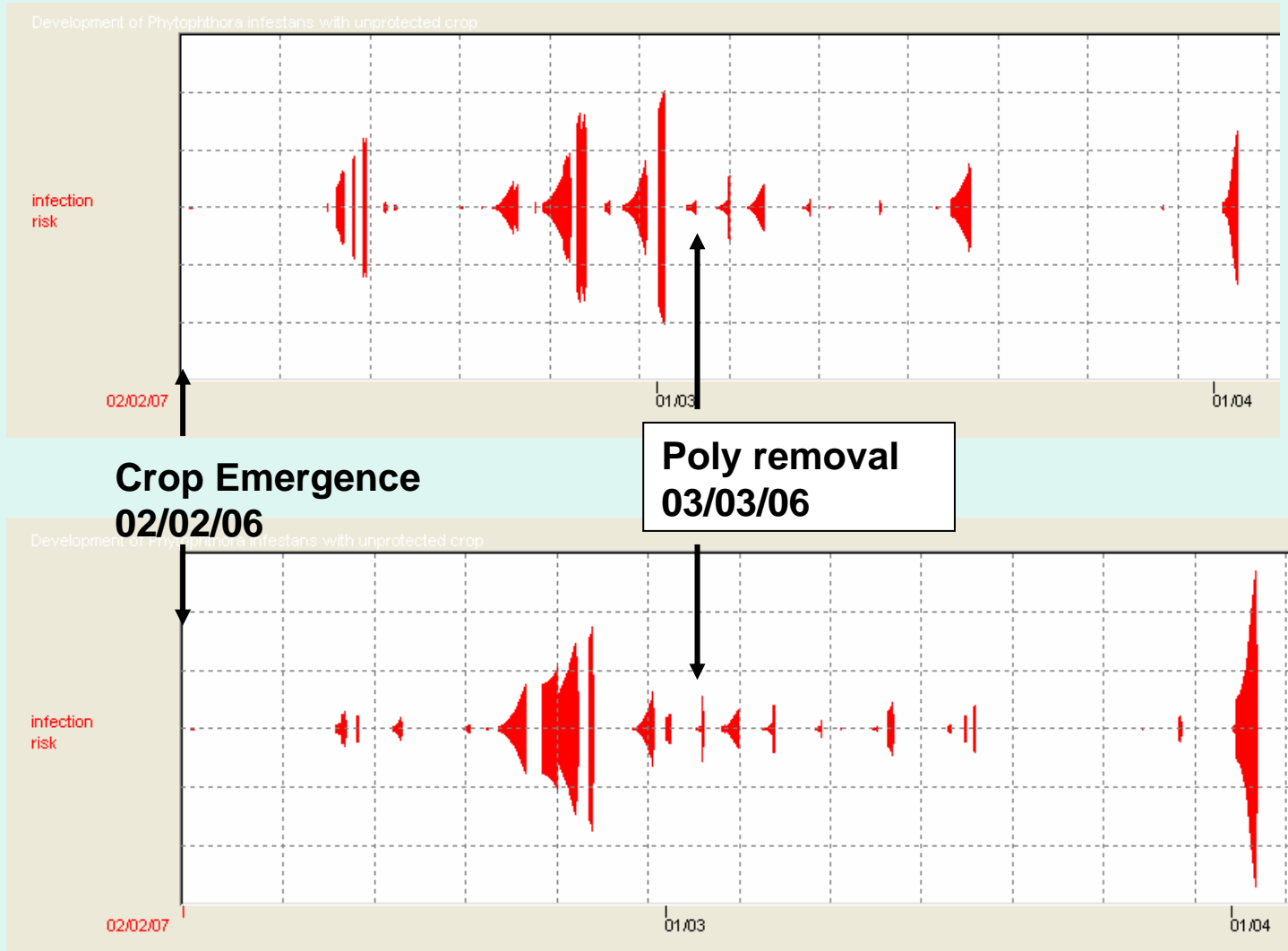








# South East Blight Risk 2007 – an early season



# Temperature & Humidity Comparison

| Year | System | T-Av | T-Max | T-Min | RH-Av |
|------|--------|------|-------|-------|-------|
| 2006 | Poly   | 7.8  | 26.6  | -0.5  | 94    |
|      | Open   | 5.9  | 12.2  | 0.3   | 81    |
| 2007 | Poly   | 8.3  | 13    | 2.5   | 88    |
|      | Open   | 8.6  | 11.9  | 2.8   | 86    |



# Question

Who are the fittest people in Jersey?

# Answer

Blight spray operators



































# Summary

- Blight risk under polythene is not always high. Low risk above the crop relates to low below polythene (sometimes it is lower under poly!)
- Lower minimum temperatures recorded under polythene.
- In 2006 & 2007 differences between open and poly stations blight risk were not as great as expected
- Both systems can be used as an indicator of infection risk under polythene – A DSS tool for polythene removal or spraying over fleece
- Further assessments required with other varieties and fleece

Thanks for your attention

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