



Stink Bug Identification & Biology

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Stinkbugs in Tomato

- Consperse stink bug:
 - *Euschistus conspersus*
- Redshouldered stink bug
 - *Thyanta pallidovirens* (= *T. accerra*)
- Say's stink bug complex:
 - *Chlorochroa sayi* and *Chlorochroa uhleri*
- Southern green stink bug:
 - *Nezara viridula*

Stink bugs in Tomato



Conspere



Redshouldered



Southern Green



Say's

Additional Stink Bugs



Euschistus servus
Brown stink bug

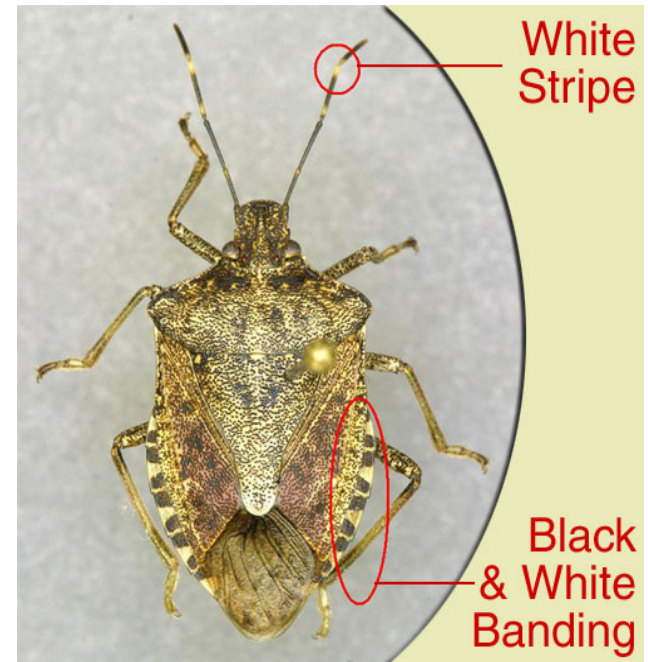
Halyomorpha halys
Brown marmorated



Brown vs. Conspere



Brown Marmorated Stink Bug



Bagrada Bug



Second Edition

Field Guide to
Stink Bugs

of Agricultural Importance
in the United States



VIRGINIA
IPM
Integrated Pest
Management

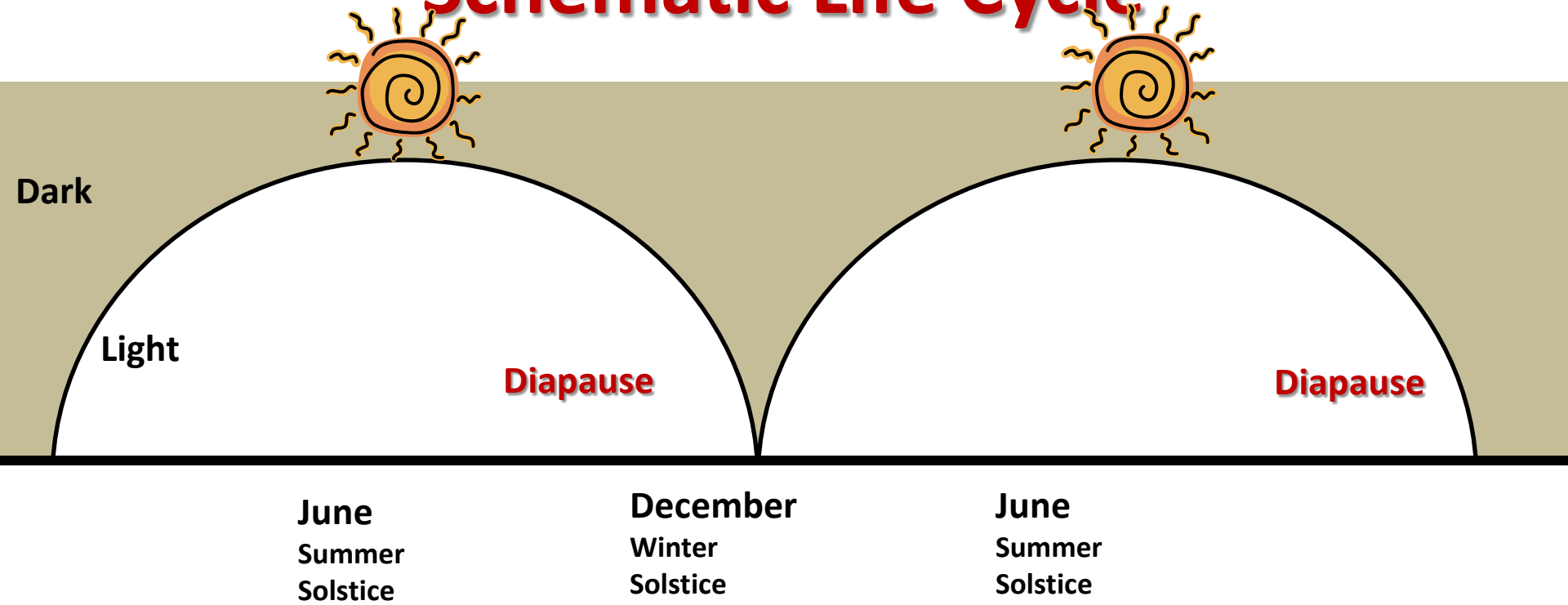
**Coming Soon in
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**Available Now on
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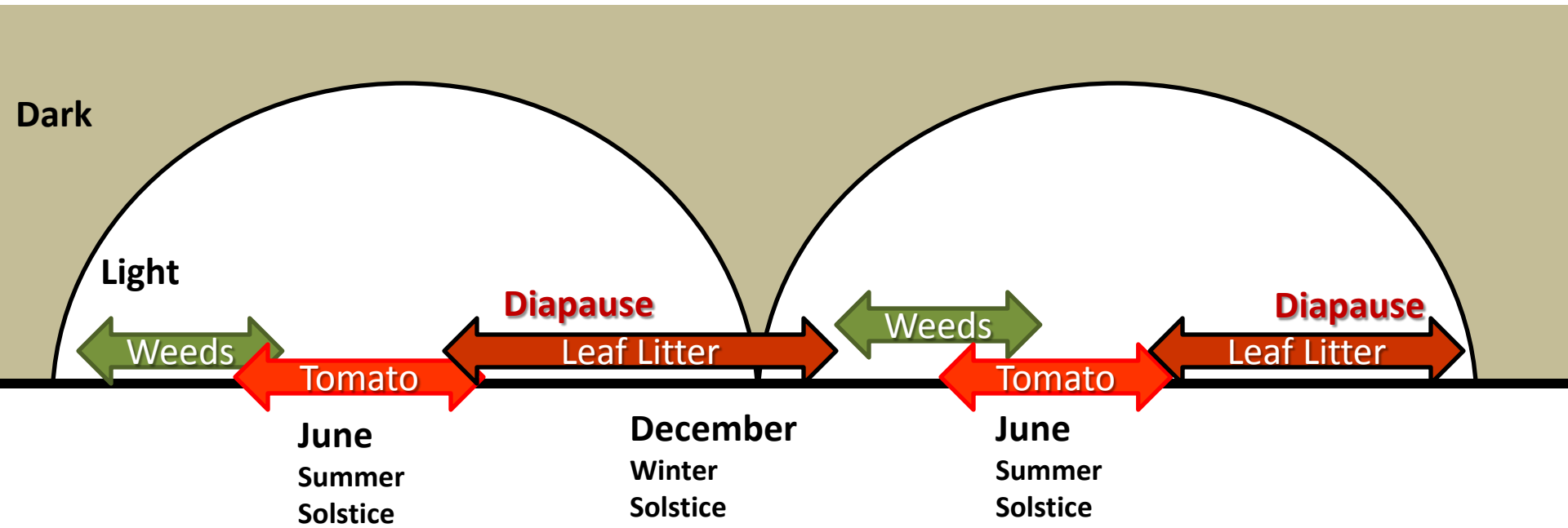
https://pubs.ext.vt.edu/444/444-356/444-356_pdf.pdf

**Search stink bug-guide-
Virginia**

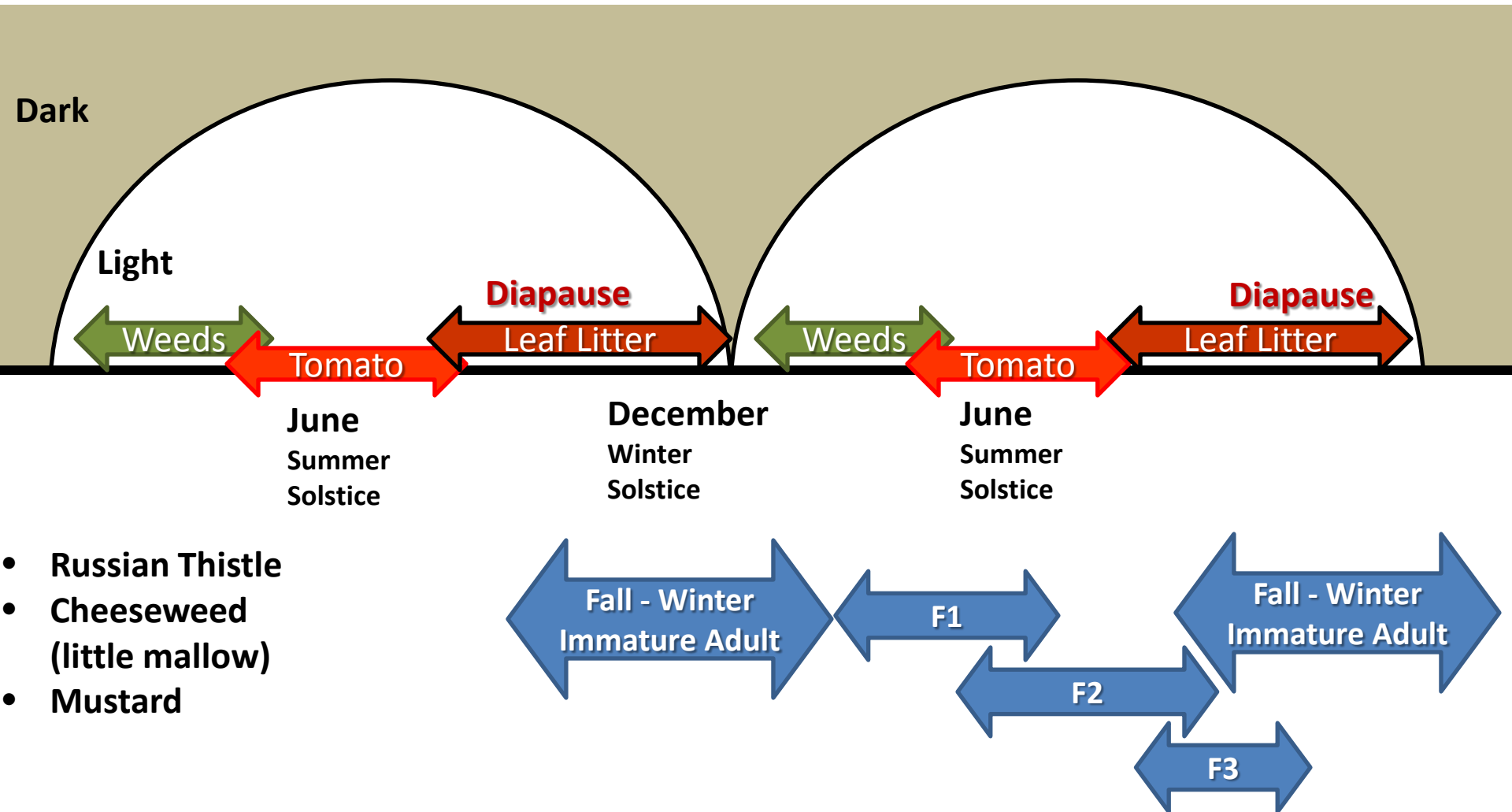
Conspere Stink Bug Schematic Life Cycle



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Conspere Stink bug Phenology Model

53.6° F Developmental Threshold

Egg development	150 DD _{>54°}
1 st -3 rd instar (small nymph)	408 DD _{>54°}
4 th – 5 th instar (large nymph)	386 DD _{>54°}
Adult	944 DD _{>54°}
Egg Laying*	275 DD _{>54°}
Total	1219 DD _{>54°}

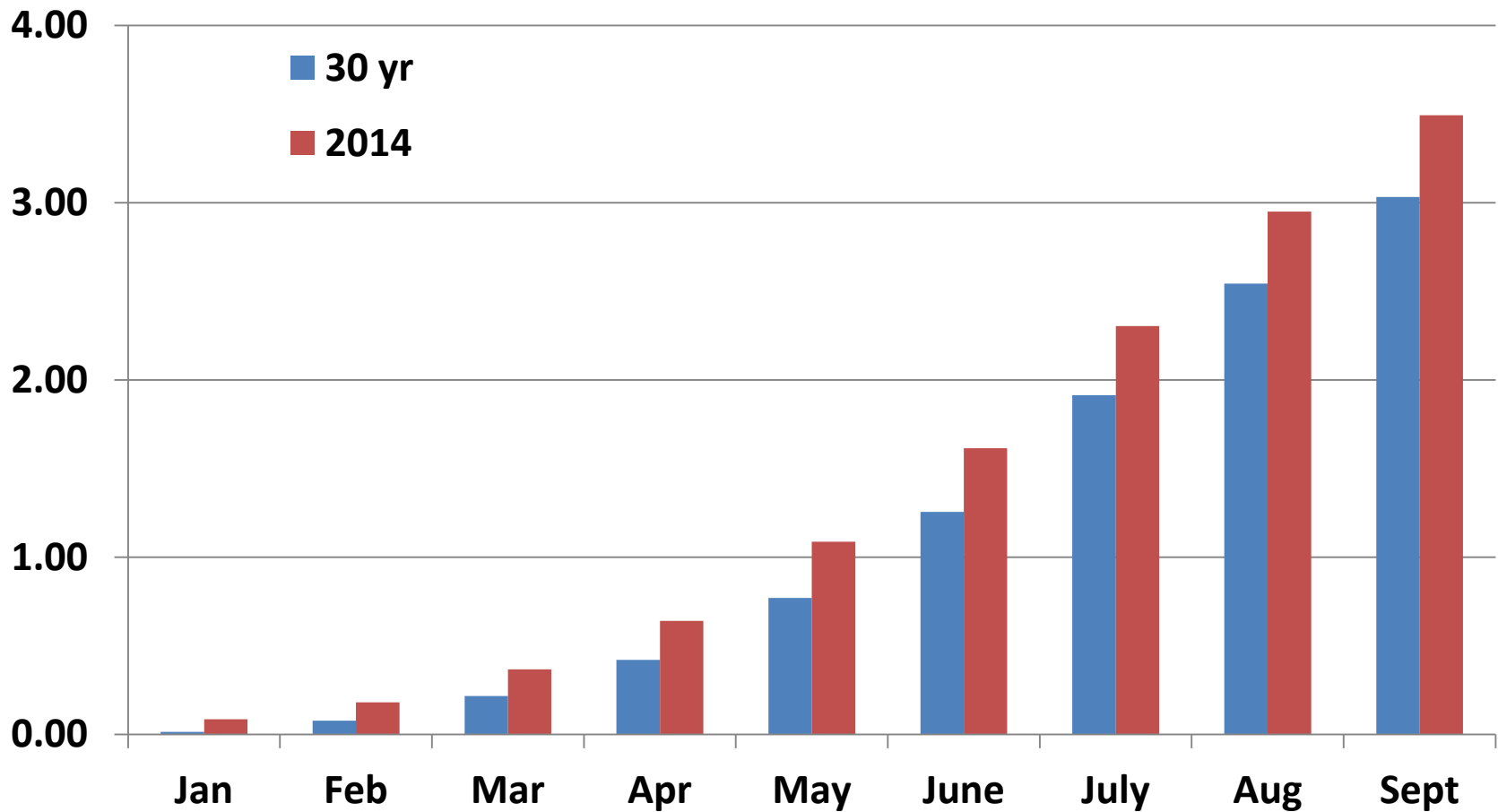
*Estimated

Cullen & Zalom, 2000

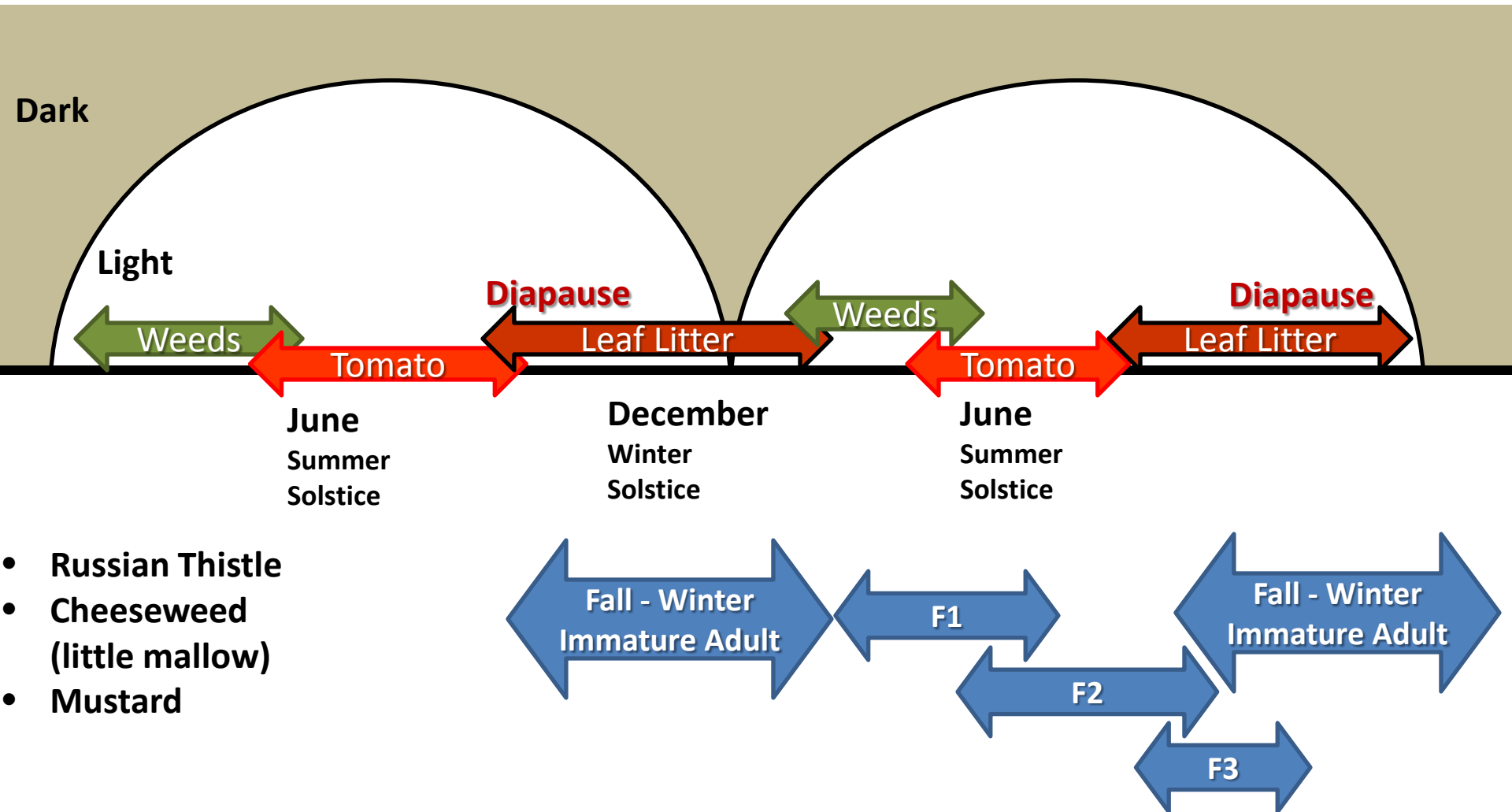
Monthly DD_{>54°} Accumulation

	30 yr	2014	2013	2012	2007
Jan	18.69	105.74	30.23	63.98	32.41
Feb	77.43	115.93	61.66	83.25	76.44
Mar	168.3	226.56	230.12	144.3	258.74
Apr	248.14	333.14	337.5	259.62	283.64
May	427.48	544.03	462.62	473.45	491.52
June	590	642.8	654.1	584.95	593.55
July	803.9	839.4	824.4	785.4	744.4
Aug	767.4	786.9	732.93	838.4	747.98
Sept	595.5	664.1	560.27	692.56	468.44
Oct	352.57	440.78	309.75	385.24	281.99
Nov	112.99	149.28	154.88	153.93	146.45
Dec	14.24	55.07	48.83	41.12	19.96

Number of Generations 1219 DD_{>54°} Per Generation



Conspere Stink Bug Schematic Life Cycle



Summary Comments

- Multiple species can be present
- Invasive species present in California
- Stink bugs populations build and recede over the years
- Weather and climate play a role, but not very predictive of an outbreak
- Regional crop and plant landscape play a role but not fully understood

Thank You

