

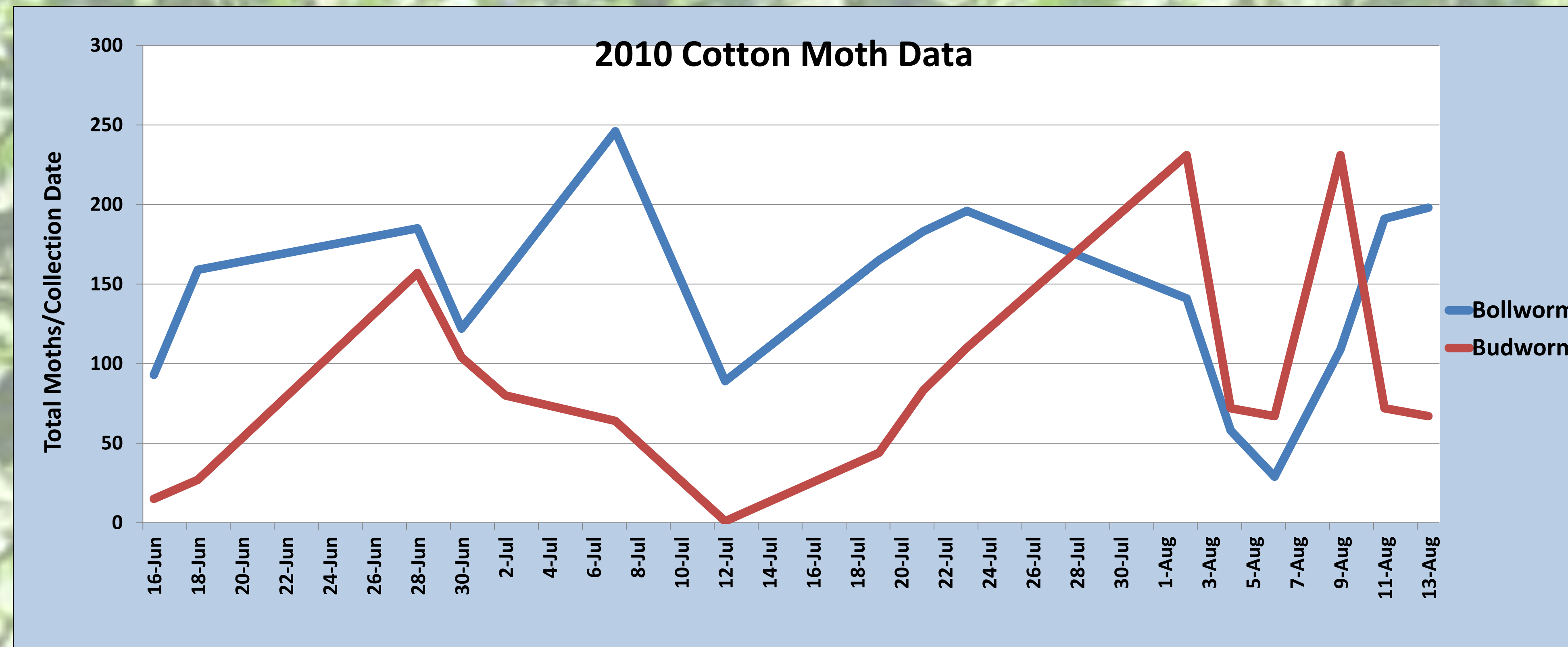
THREE YEAR HISTORY OF BOLLWORM AND TOBACCO BUDWORM MOTH FLIGHTS IN PHILLIPS COUNTY ARKANSAS

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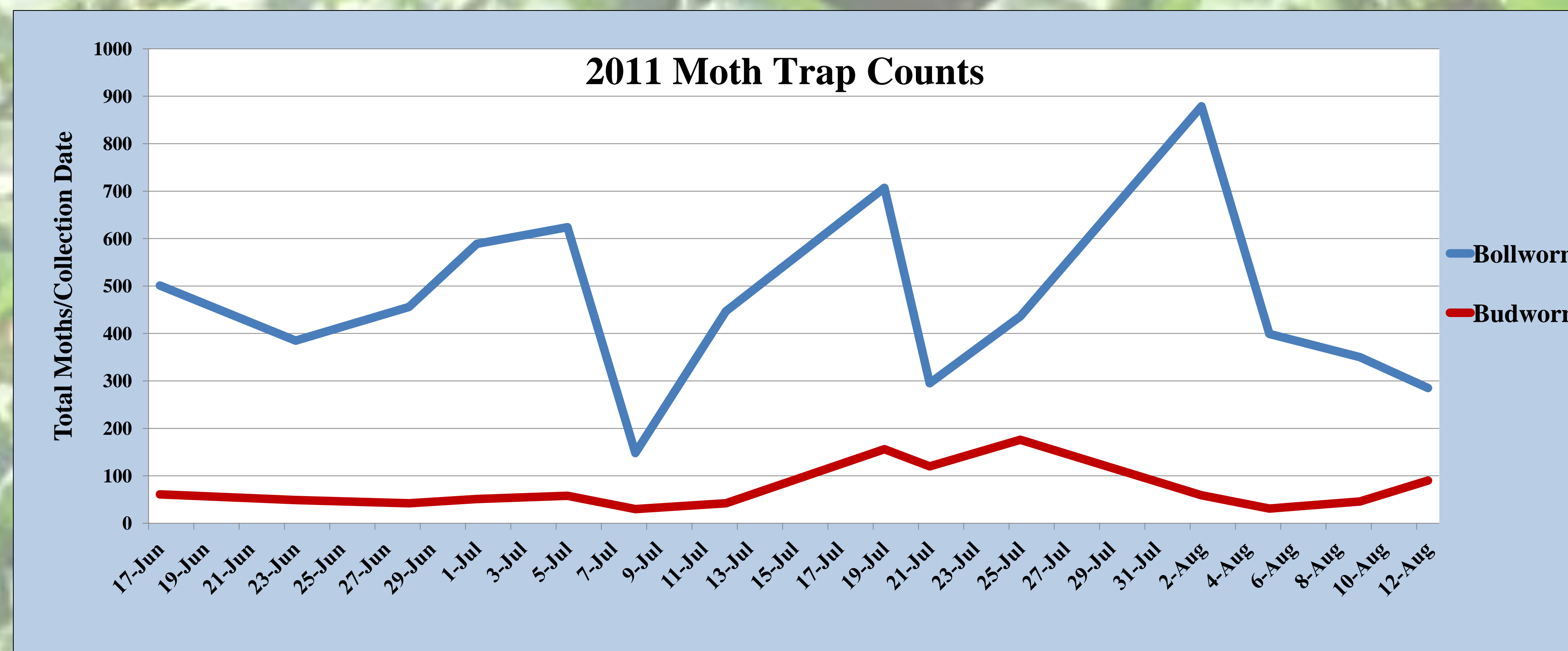
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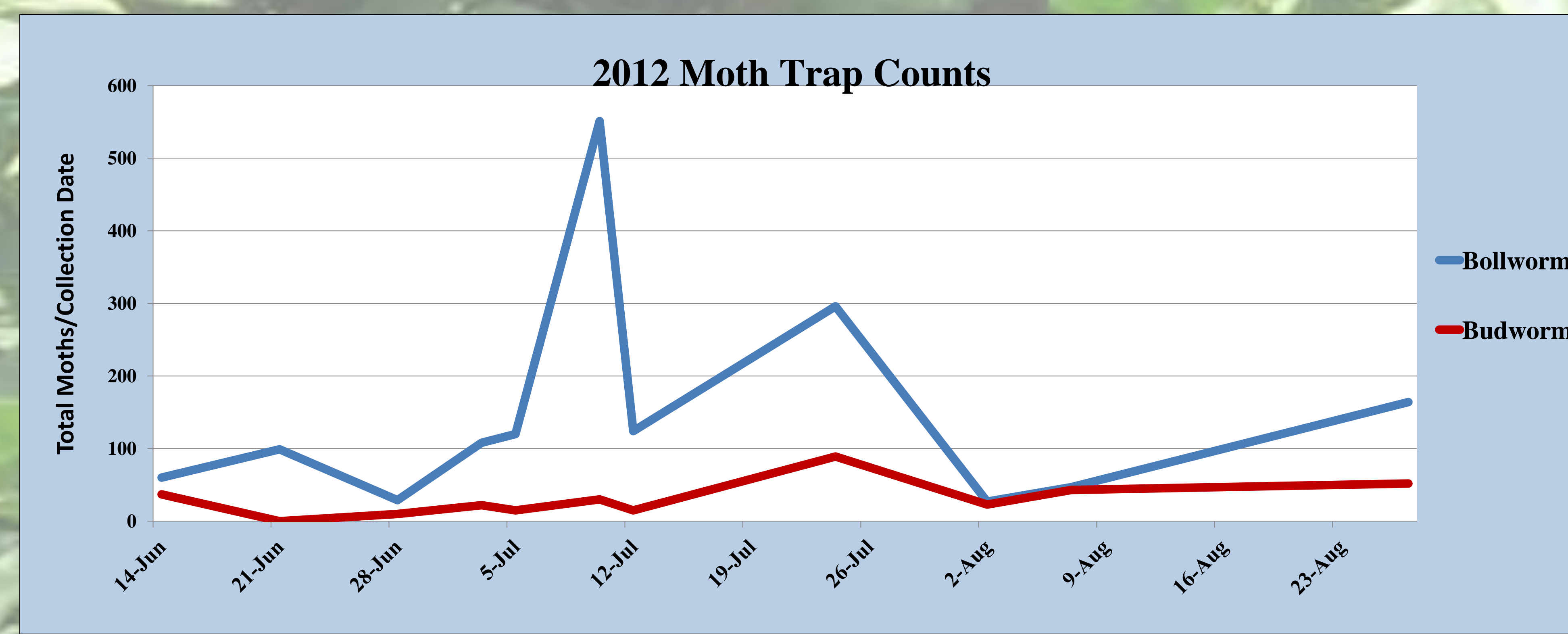
Purpose

The bollworm/budworm moth trapping program is part of the overall IPM program in Phillips County and all cotton producing counties in Arkansas. This data serves as a source of information for growers and consultants and serves to alert them when damaging levels of these pests in area cotton and soybean fields may be occurring.



Phillips County

Phillips County is a major agricultural county in AR. The county averages 30,000 acres of cotton, 221,000 acres of soybean, 30,500 acres corn. To assist producers in making decisions in controlling bollworm (*Helicoverpa zea*) and tobacco budworm (*Heliothis virescens*) in cotton and soybean a trap line of 8 to 9 Hartstack-style moth traps are established to sample populations of each species of moths in the area. Information on moth trap captures are shared with growers through monthly newsletters, bi-weekly email notifications, bi-weekly radio address. We took the data from the last several years to see if an increased moth count could be predicted by using this historical data. If this is possible it would allow our clientele to be better prepared for impending problems with these pests. Data was gathered and analyzed from 2009 to 2012 to look for trends to see if it is possible to predict the peak of both the bollworm and tobacco budworm flights. Initial examination indicates increased activity for bollworms around early July each year, and then again the species numbers increased during late July/early August. Tobacco budworm moth flights have increasing numbers in late July for all three growing seasons. The moth trapping program will continue in Phillips County to provide information to local producers for management decisions.



Discussion:

Although the bollworm/budworm moth trap numbers show a general timeframe when populations may rise, these trends are affected by environmental conditions such as weather patterns and cultural practices such as date of planting. Historically, many of the bollworms we experience have migrated into Arkansas from Texas, Louisiana, and Mexico. There is also a current shift in acreage to corn crops which will support early populations of bollworm. Budworm populations in Phillips County have been extremely low in the past two years. Weekly moth trap counts should be taken and charted in order to more closely predict when populations will spike each year.



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