

Is it OK to deploy kestrel nesting boxes in areas where there are red tail hawks?

Yes, we deploy boxes where there are red-tailed hawks. RTHAs are essentially everywhere so we can't avoid areas where they live.

Can a person raise and distribute American kestrels?

There are likely all types of regulations about this type of thing, if it's even possible, given that kestrels are protected by the Migratory Bird Treaty Act.

An important thing to keep in mind with the kestrels is that landscape matters a lot as to whether you are going to get kestrels, starlings, or both. In areas with lots of woods, the risk of starlings is quite a bit higher (based on our newest work in blueberries). So growers in areas with high risk for starling occupancy of kestrel boxes will need to be much more proactive in monitoring the boxes for starling activity. Starling nests can be removed from the boxes because starlings are not native and thus not protected by the treaty act mentioned above.

If birds stopped foraging in early September around the time red tail hawks were seen frequenting the area, could the hawks have caused a reduction in frugivores?

Red-tailed hawks primarily eat mammals although they will also eat some birds. In sweet cherry orchards the kestrels were very active and we attribute the reduction in pest birds to them. For grapes, ripening in the fall, yes, red-tailed hawks could potentially influence frugivore activity although we have not investigated this.

For farms with four wooded edges, are they at max risk for bird damage?

We found in Michigan, reported in the Crop Protection paper, that tree fruits in low to moderate forest cover landscapes had higher damage than blocks in higher forest cover landscapes. However, we also found that forest edges provided staging areas for frugivorous birds to enter blocks (so somewhat different results from the landscape spatial scales). Generally I would think yes, a block with four wooded edges is at high risk.

If wild fruit is reduced due to drought or frost, does this contribute to bird predation on fruit?

When wild fruit is reduced, cultivated fruit is also likely to be reduced so I don't think you can necessarily attribute a pattern to the wild or cultivated fruit reduction. However, the Crop Protection paper indicates fruit reduction leads to higher percent damage. This is likely because there is less fruit to choose from and also may be due to there being fewer moisture sources (water both in and out of fruit) for birds to get their water requirements filled.