From: Richard McDonald [**********] Sent: Monday, May 14, 2012 12:00 PM

Subject: Y.I.B.! NC HWA ST + UV Update - we've done it again...

Hey there y'all;

Here's an update on Sasajiscymnus tsugae (St) in our area – I am finding them consistently (!!!!) at Grandfather Golf and Country Club (GGCC) right by the clubhouse – how convieeeenient. Elevation of 4000 feet, right at the northern base of Grandfather Mountain in NW NC.

I found 5 St adults on the same Thursday that Tom and Ryan found 66 at Mountain Lake; and I had found 5 the week earlier on the same tree at GGCC. This was from a release of 52 St beetles on that tree back in 2008 that were progeny from the bag studies we did with Monty. These beetles would be at least F4? These trees are still tagged.

So I went out last Friday the 11th May to GGCC, to the same tree to see if this was consistent – I got 4 St adults, and 5 St larvae (3 small and 2 large) and also 4 Laricobius larvae, too – some overlap just like Carol wrote in the HWA tome. I kept the 4 St adults in a 20 dram vial with food and separated the 5 larvae (now all large larvae) in ten dram vials with food and am sending them to Nathan. Three times in a row on the same tree within a month – I'd say St has arrived and established in that area. I will do more sampling there soon.

I did not expect to find establishment of St beetles in the High Country; but that is what is happening with St now and we are seeing widespread validation of a summer HWA predator, as there are reports of St recoveries from Georgia, NC and Virginia that I know of. I'm impressed! We've also found St at mile marker 307 on the Blue Ridge Parkway; this is basically on the other side of Grandfather Mountain. I've been a diehard Laricobius fan, but with what I'm seeing in the field now, it looks like St is catching up. I need to do more survey work in that area; but we are finally getting:

BRACKETING - An effective winter and summer predator on HWA, mimicking the system found in nature where there is always a predator attacking the HWA no matter what stage. Our hemlocks are getting the Tag-Team we've always needed. Progrediens HWA predators are the hardest to establish over the long haul, at least from what we are seeing.

So, ST team, you have done it yet again. Congrats to you all, another long haul bearing fruit! St has arrived in our area, at least. It's a lesson in perseverance and sometimes biocontrol can take a long time. We are going to need an addendum to the HWA biocontrol pub!

Please feel free to share this information as needed.

BeST to all, and congrats; we have another beneficial resident in our woods eating HWA.

Scymncerely,

Dick Mc

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