An aerial photograph showing a complex network of blue waterways winding through a dense, green forested landscape. The waterways form a series of interconnected loops and channels, typical of a coastal estuarine system. The surrounding land is covered in thick vegetation, with some cleared areas and small structures visible in the lower-left quadrant.

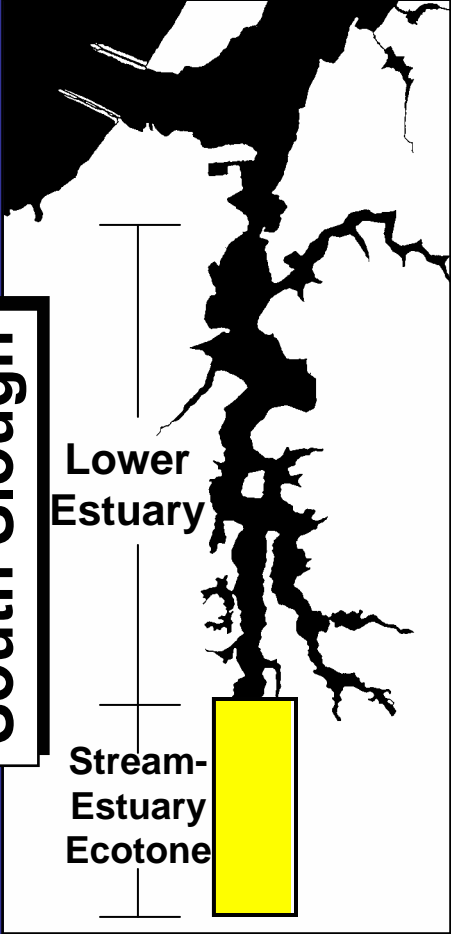
MOVEMENT OF COASTAL CUTTHROAT TROUT WITHIN THE REACH OF LARGE WOOD PLACEMENT IN WINCHESTER CREEK, SOUTH SLOUGH

Collaborators:

South Slough National Estuarine Research Reserve
Oregon Department of Fish and Wildlife

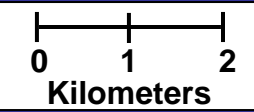


South Slough



Lower Estuary

Stream-Estuary Ecotone



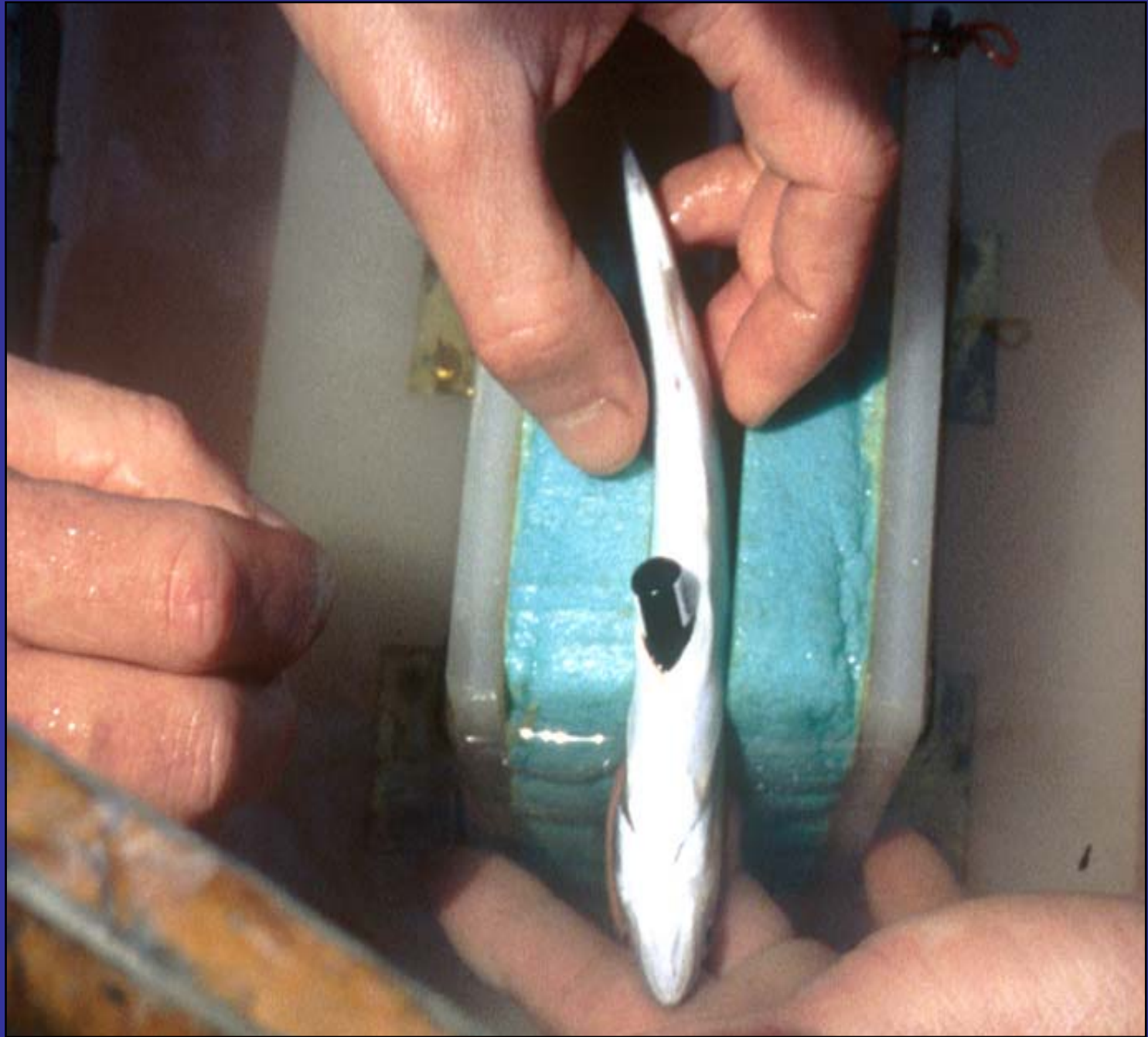
Stream/Estuary Ecotone

Methods

- Numbers of downstream-moving juvenile cutthroat trout were monitored using a rotary screw trap, from December 2006 to May 2007
- Fish between 134 and 192 mm were implanted with acoustic tags (20 from trap catch; 5 from beach seine, Dalton Cr reach) during April and May
- Movement was monitored with 12 receivers (8 in wood/no-wood treatments within ecotone; 2 in tributaries; 2 in lower estuary)

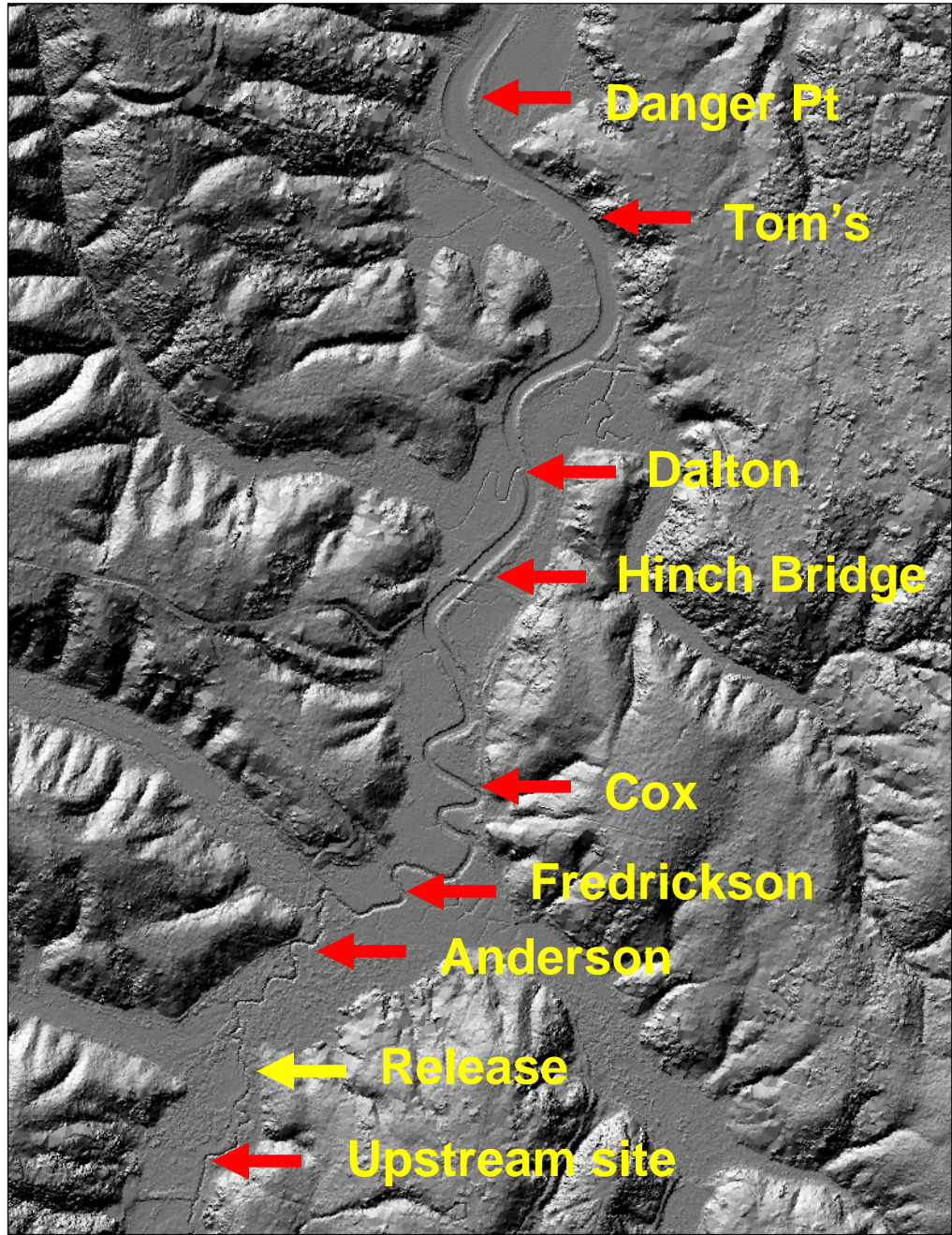


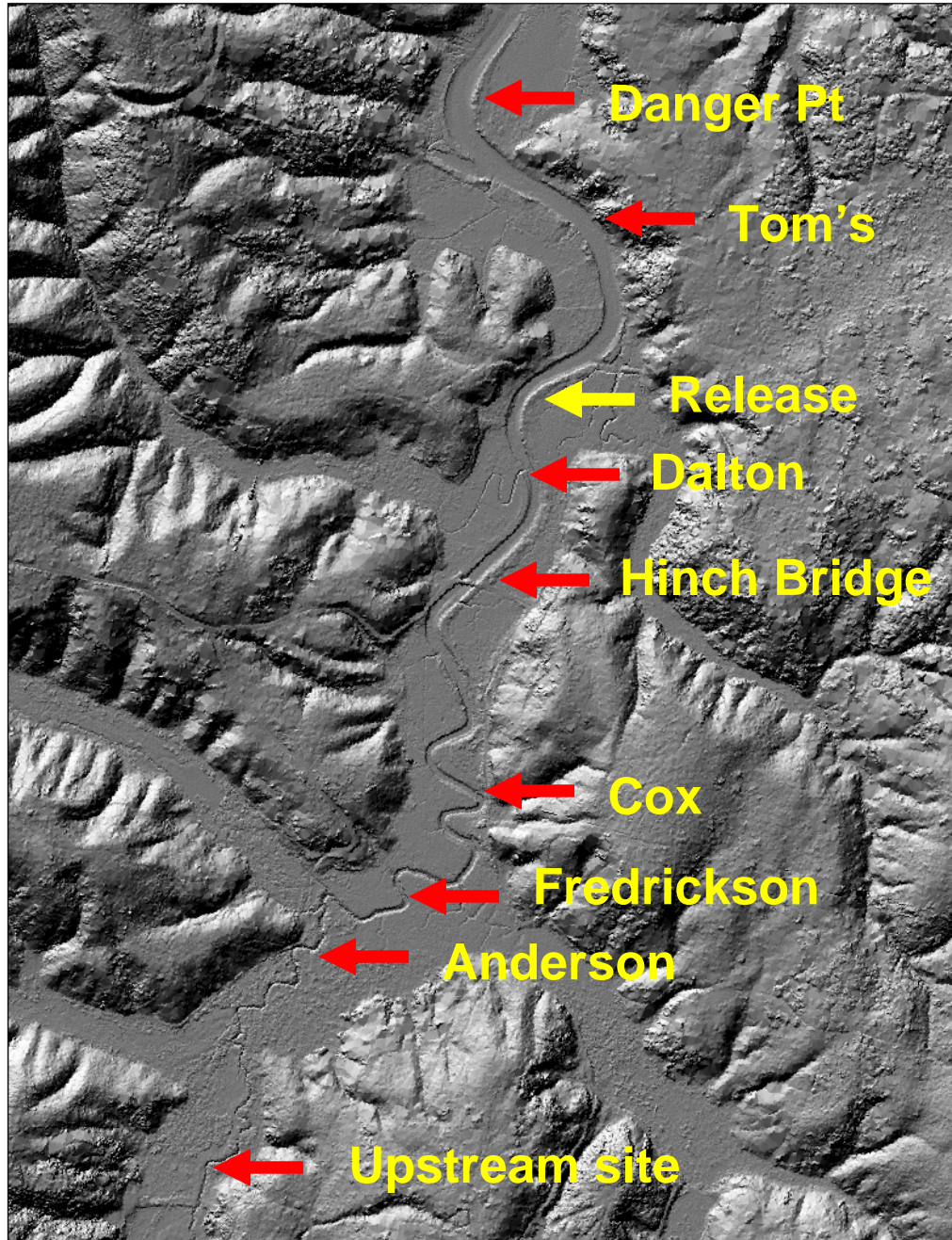




Real Science in Action







Danger Pt

Tom's

Release

Dalton

Hinch Bridge

Cox

Fredrickson

Anderson

Upstream site

Anderson Cr Reach (wood treatment)





Fredrickson House Reach (no wood)



Cox Canyon Cr. Reach (natural wood)



Hinch Bridge Reach (no wood)



Dalton Creek Reach (wood treatment)



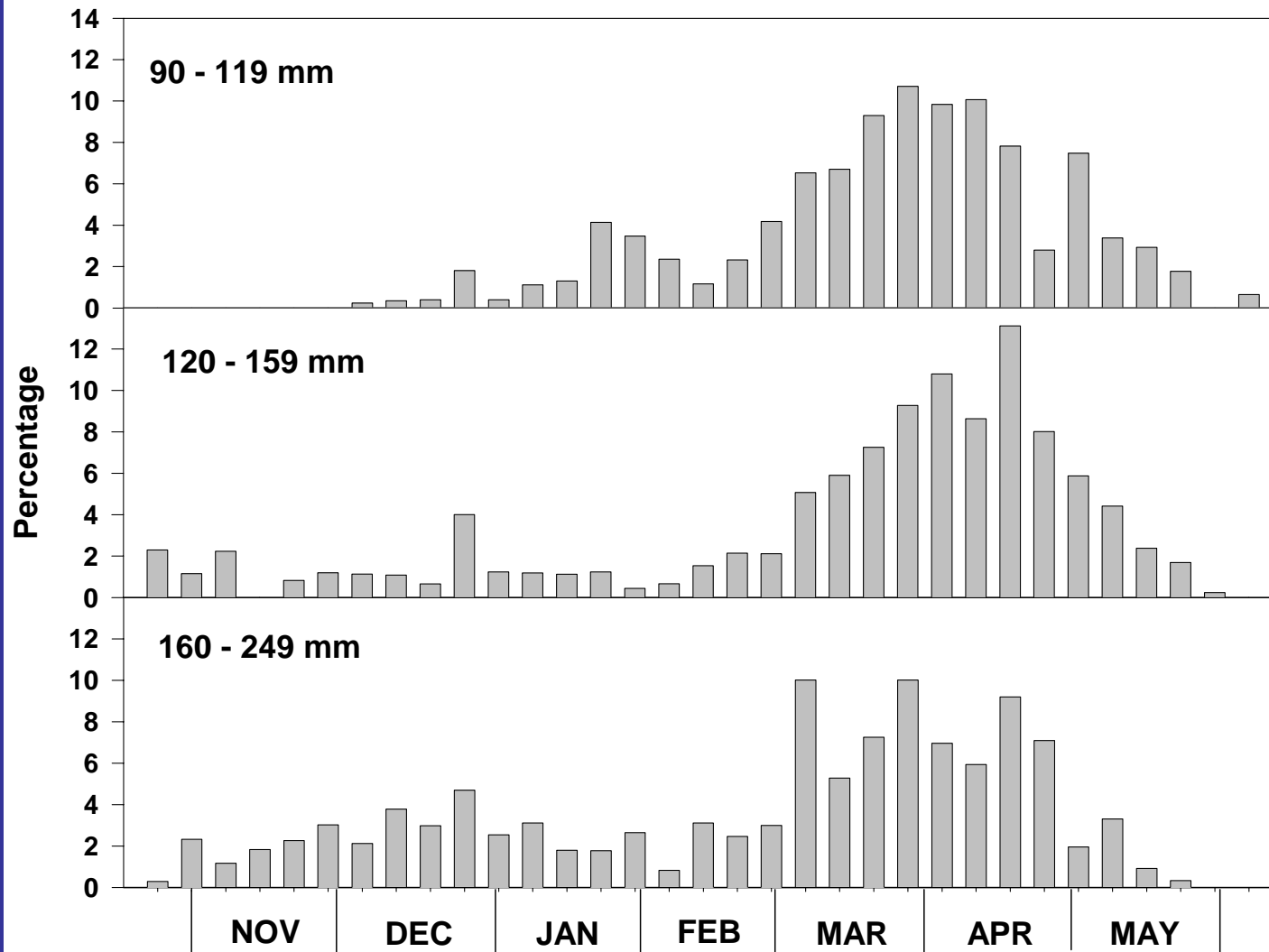
Tom's Cr Reach (wood treatment)



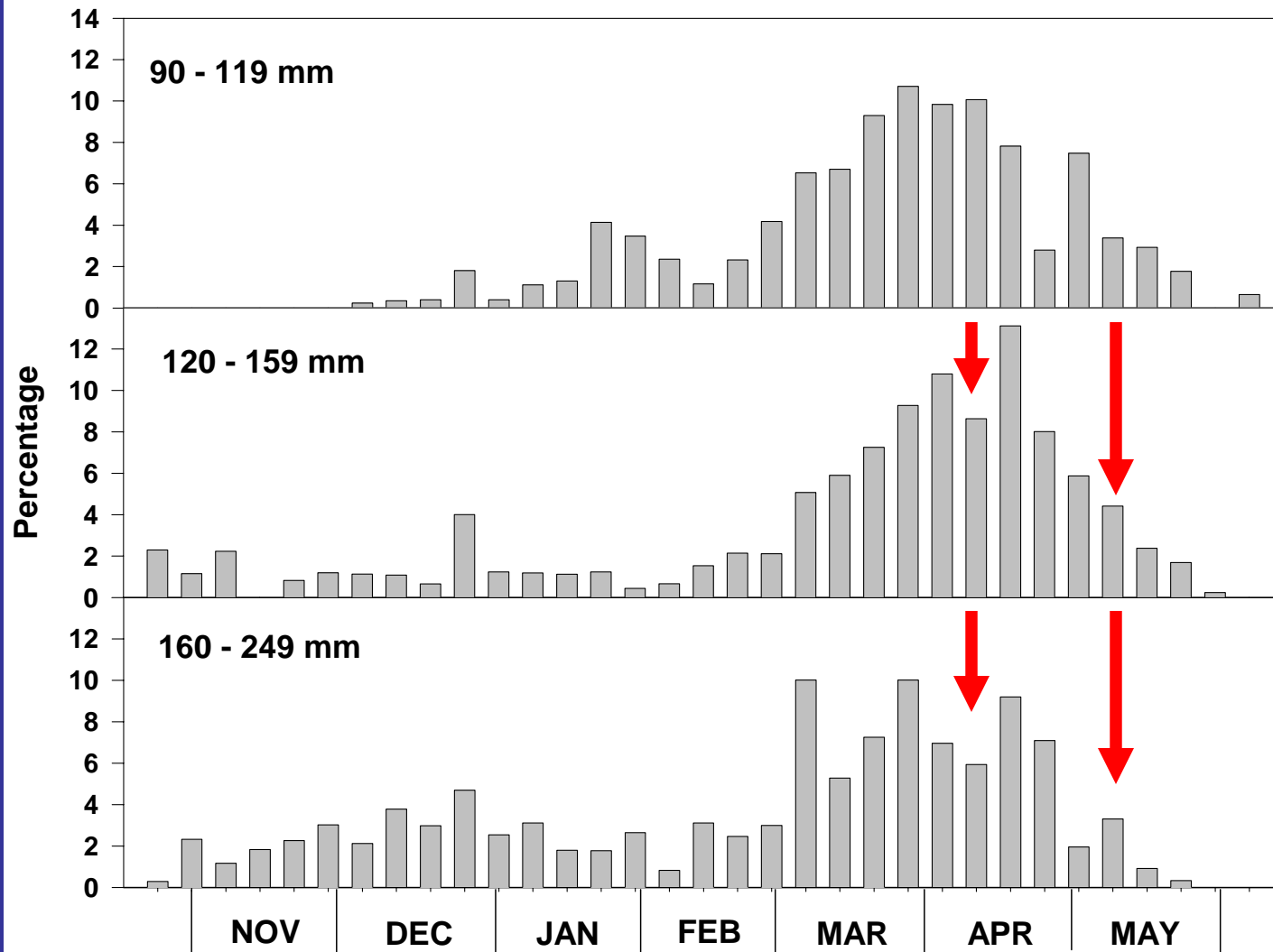
Danger Point (no wood)



Winchester Creek Cutthroat Trout 1999 – 2007 (mean) Timing by Size Class

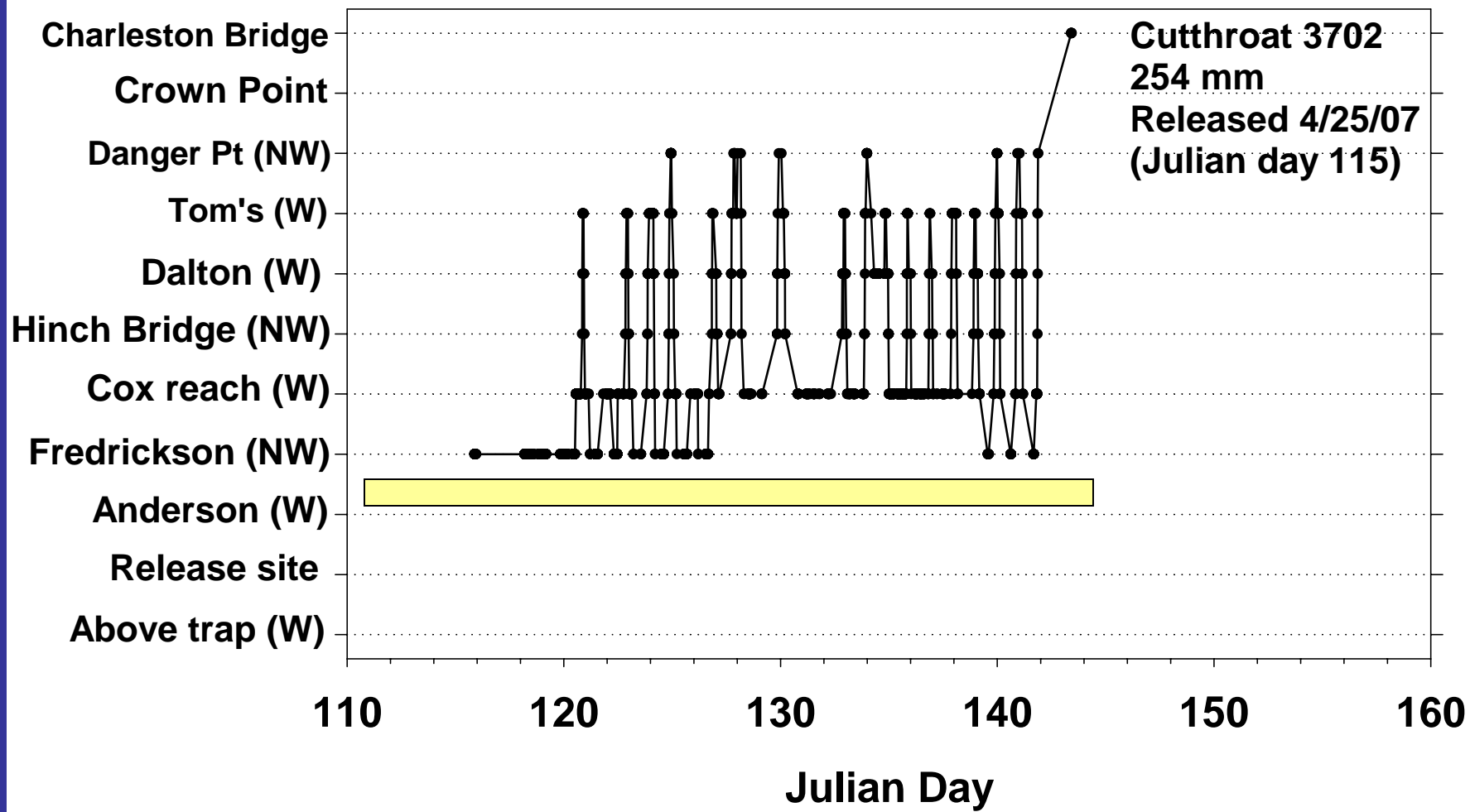


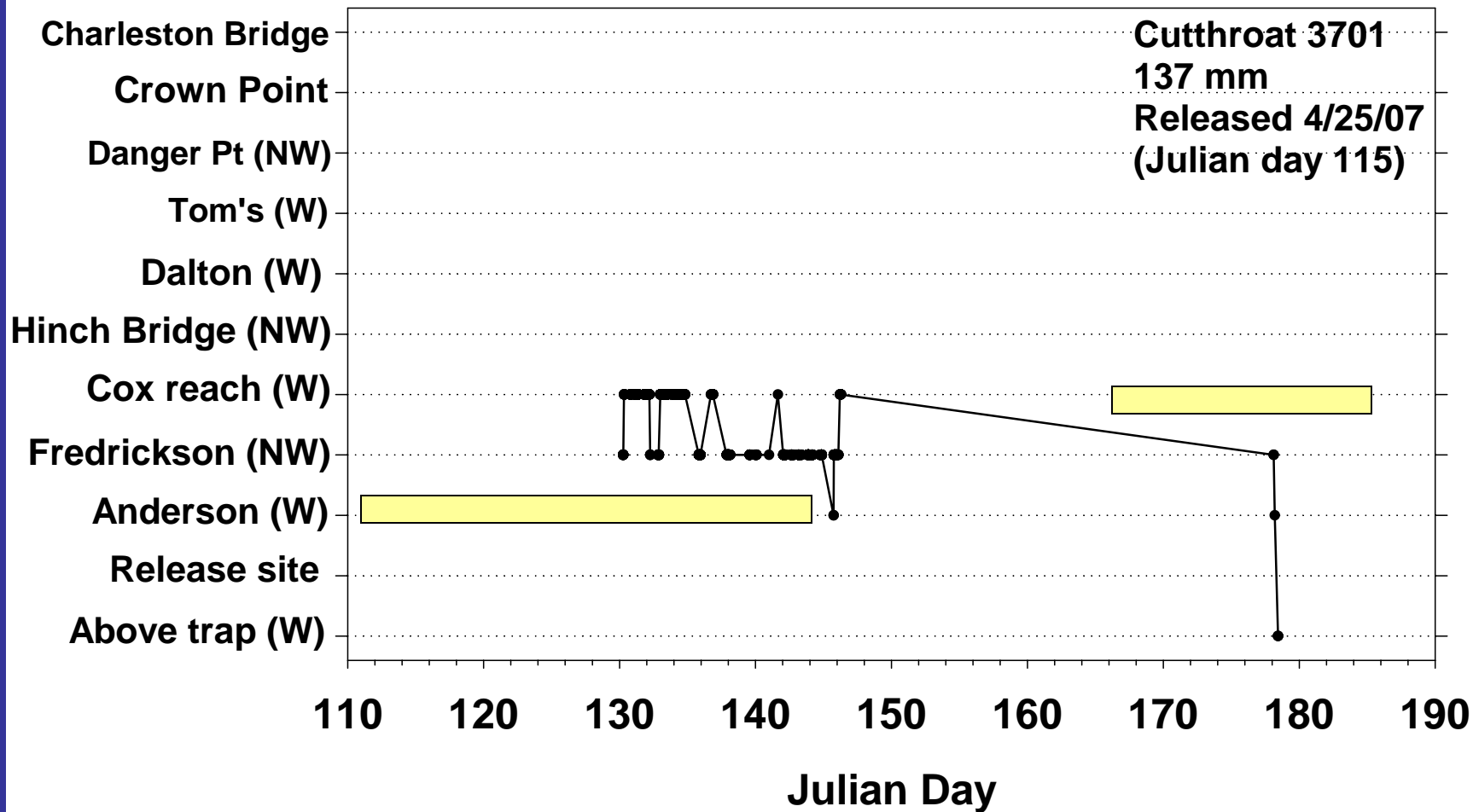
Winchester Creek Cutthroat Trout 1999 – 2007 (mean) Timing by Size Class

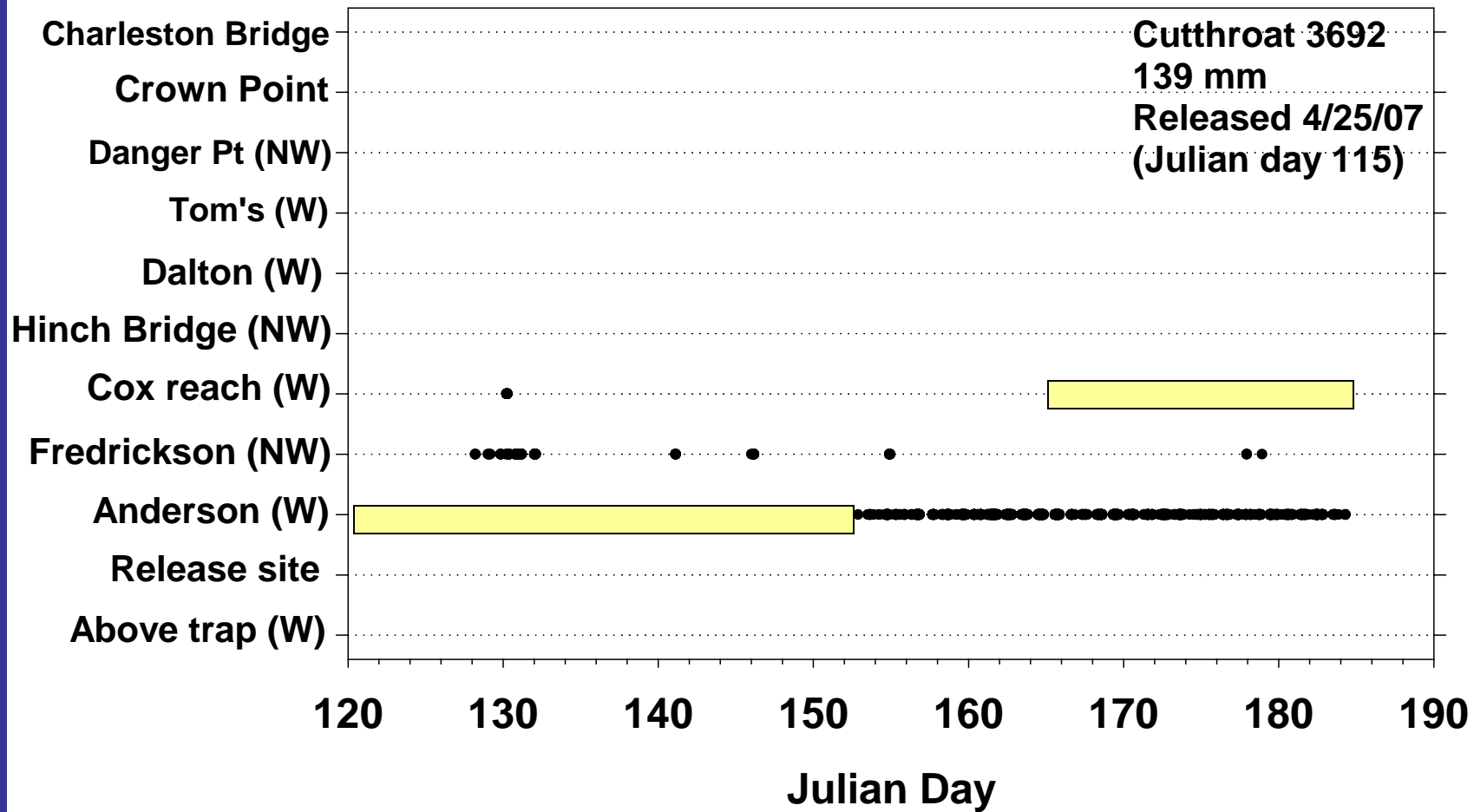


As of July 5, 2007

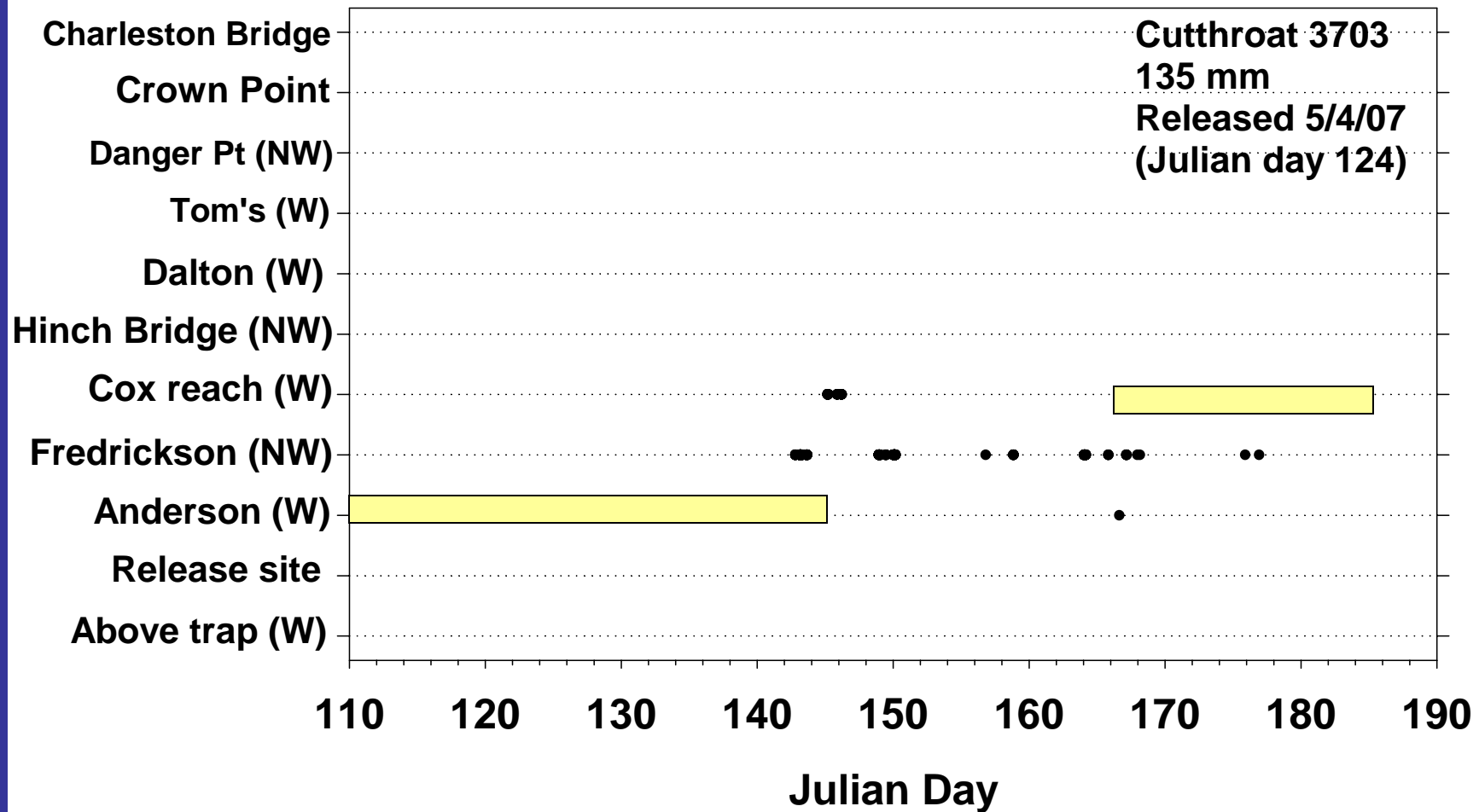
- 4 fish moved above juvenile trap release site soon after tagging and remained above. One additional fish moved upstream after 64 days
- 3 fish—no data, probable mortalities, (134-143mm)
- 18 within receiver range, possibly 3 mortalities after 30-40 days of movement

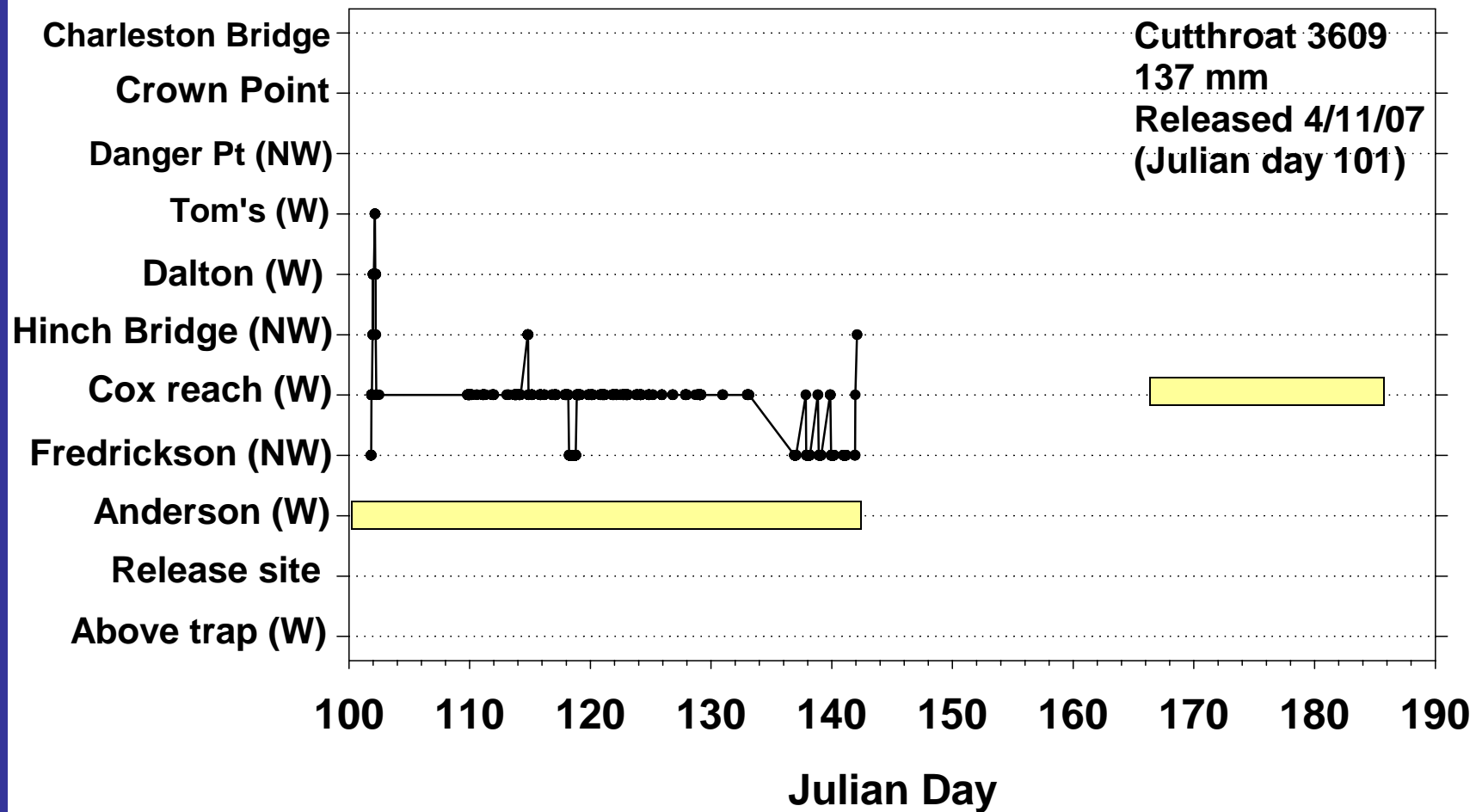


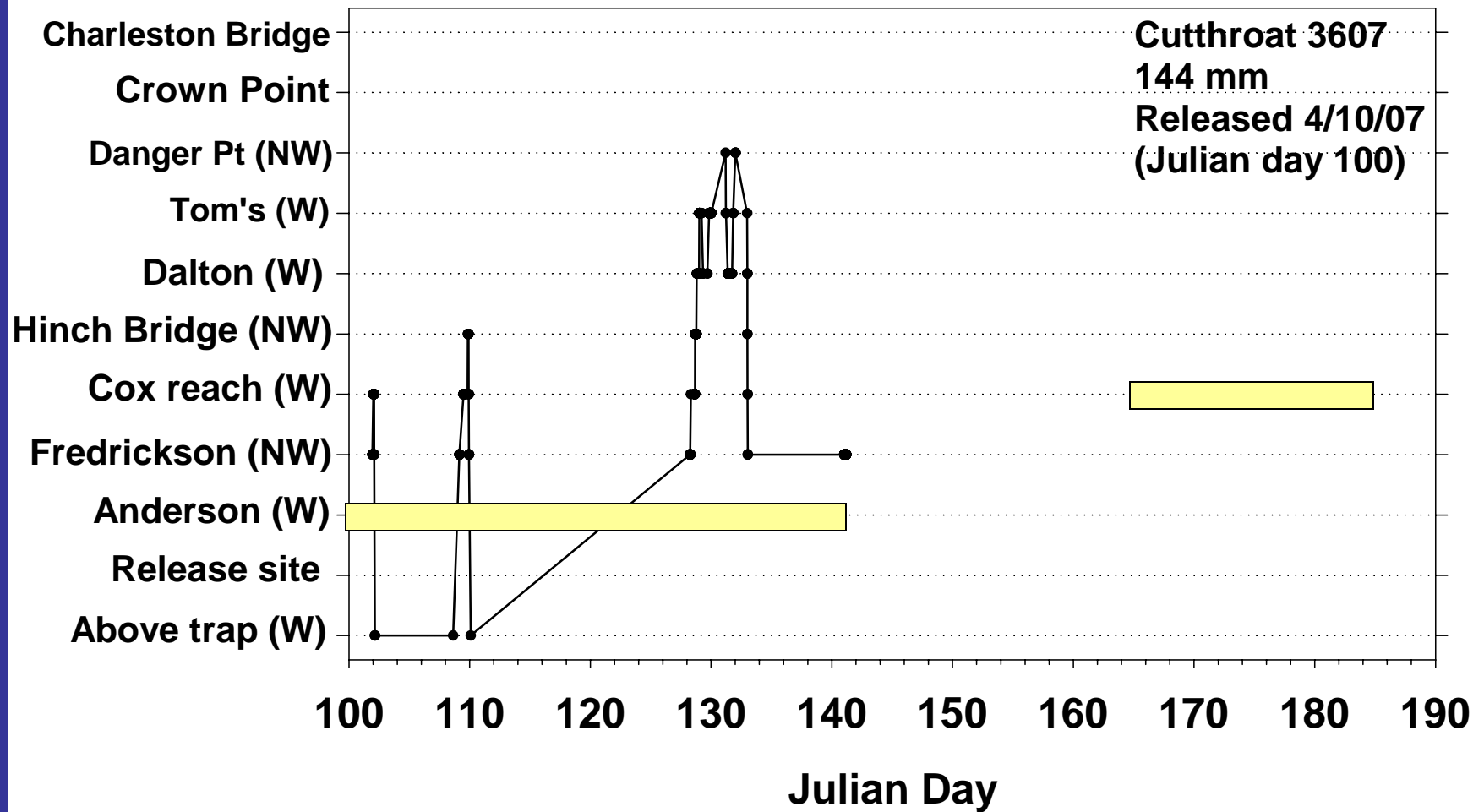


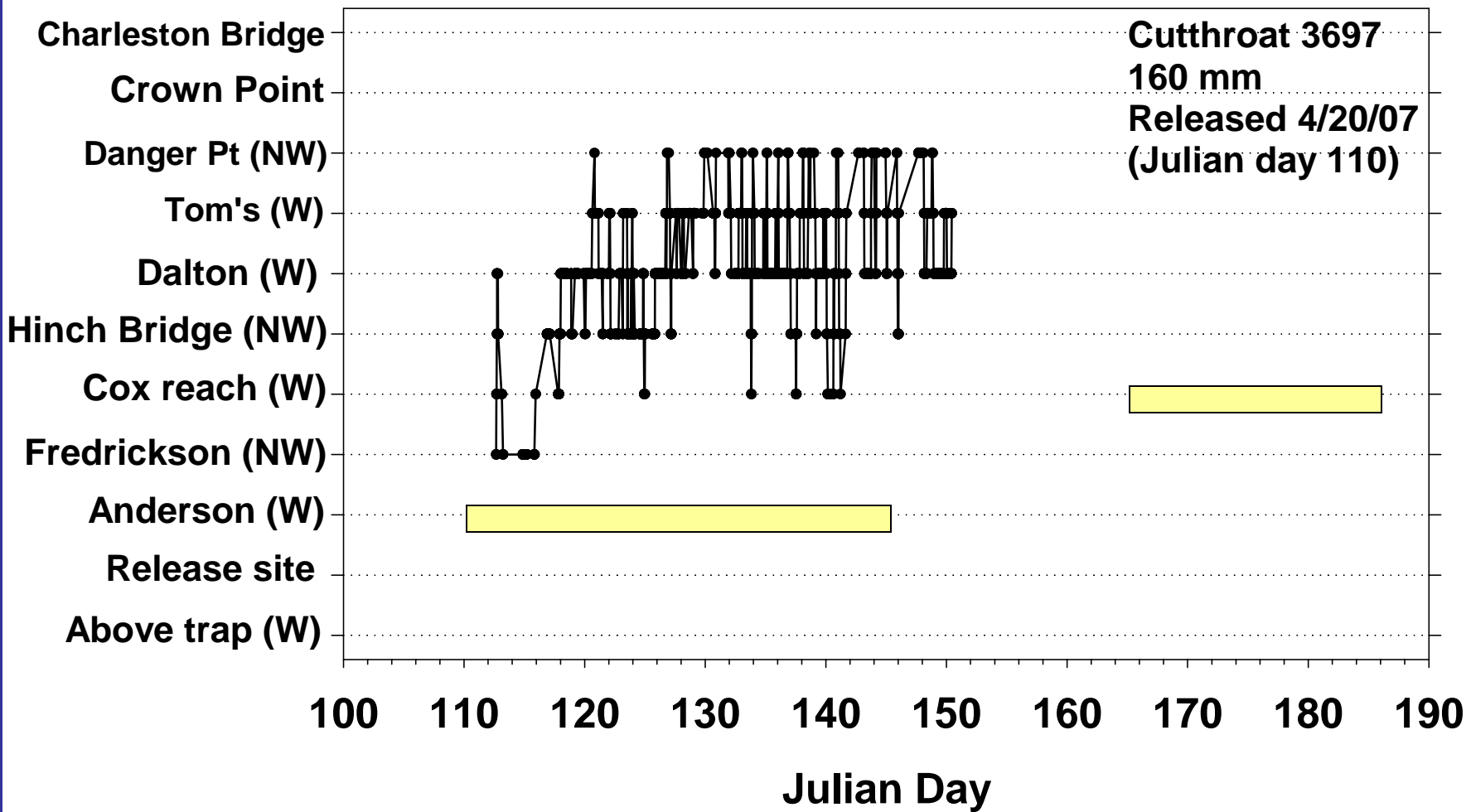


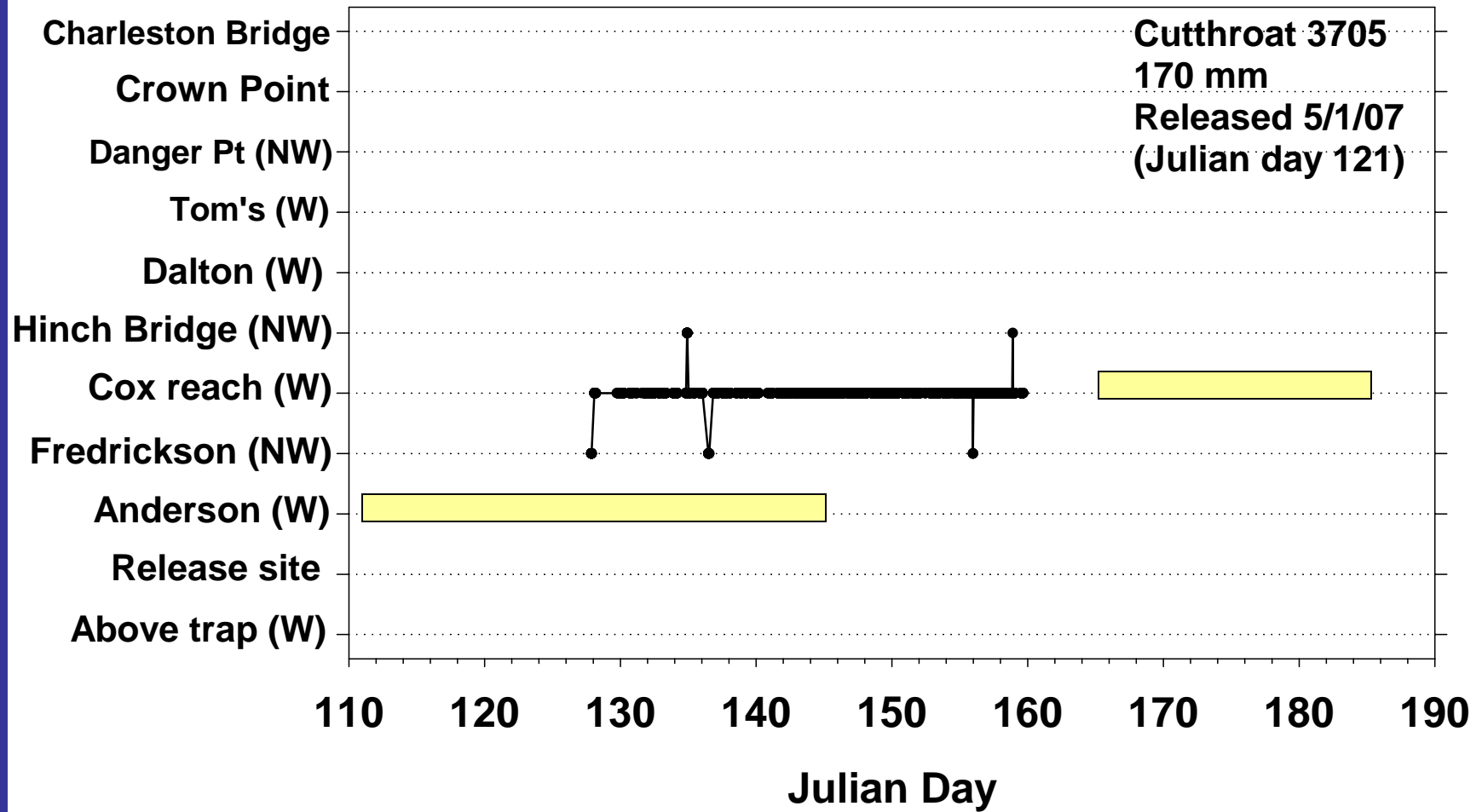




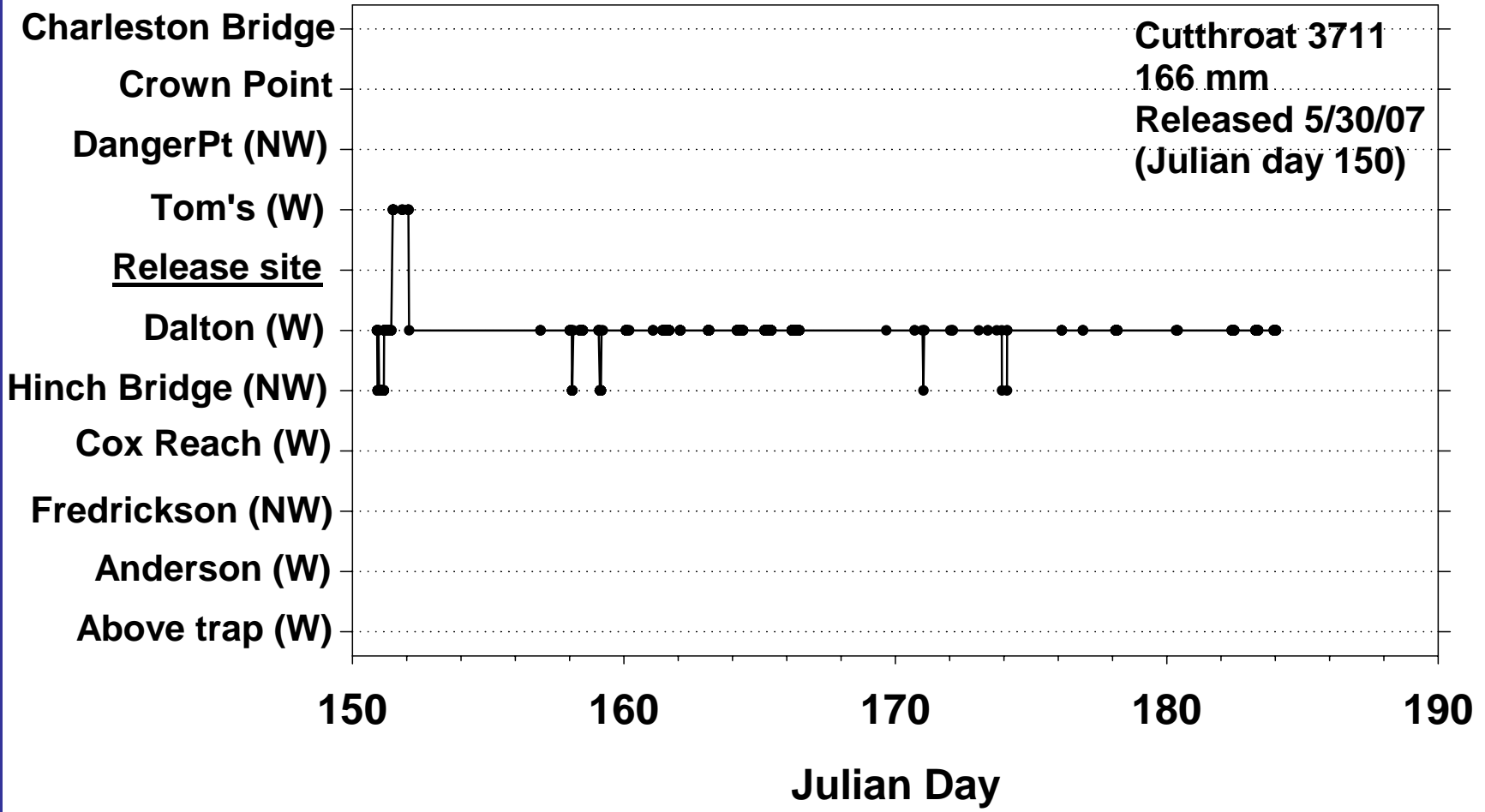






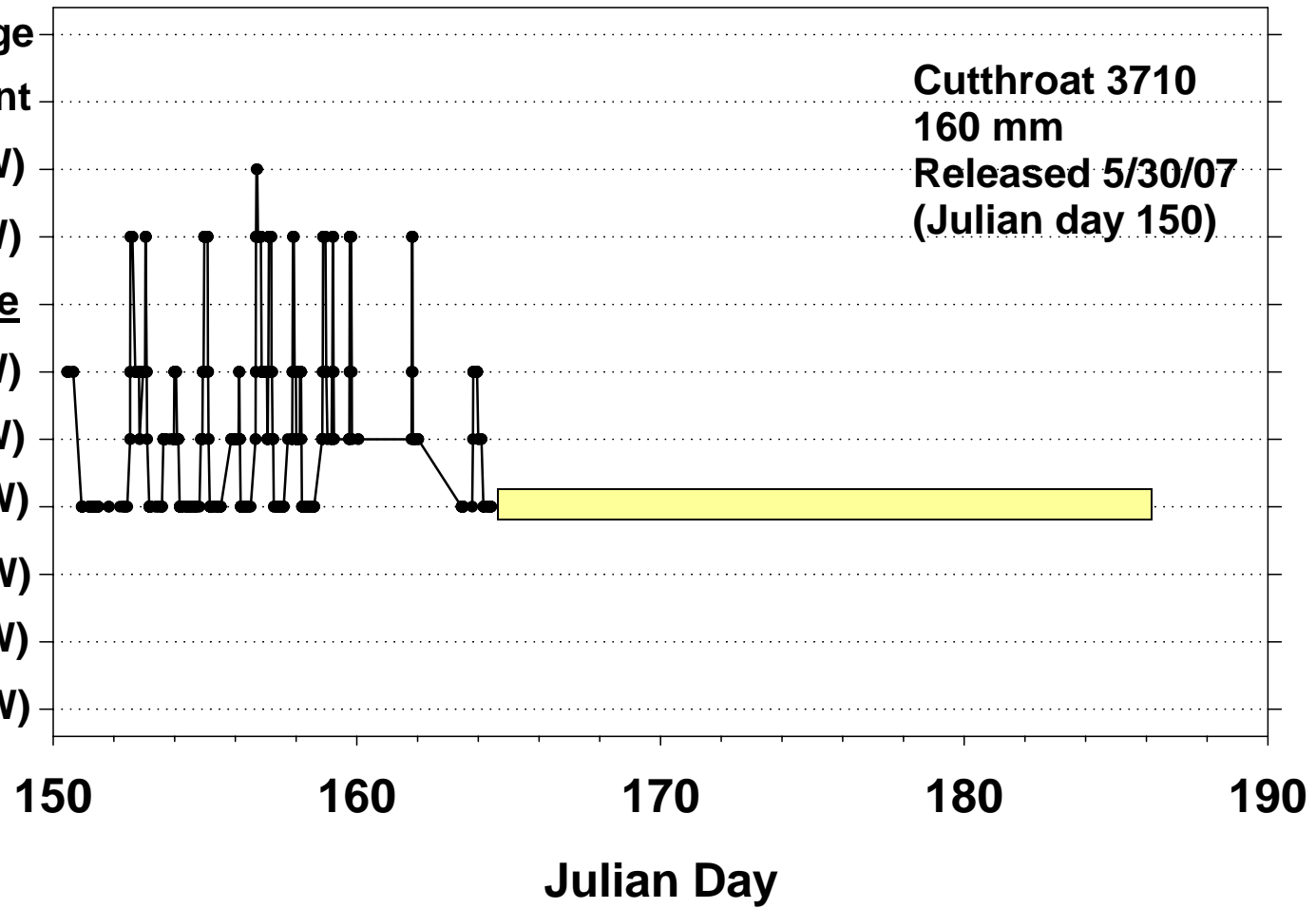






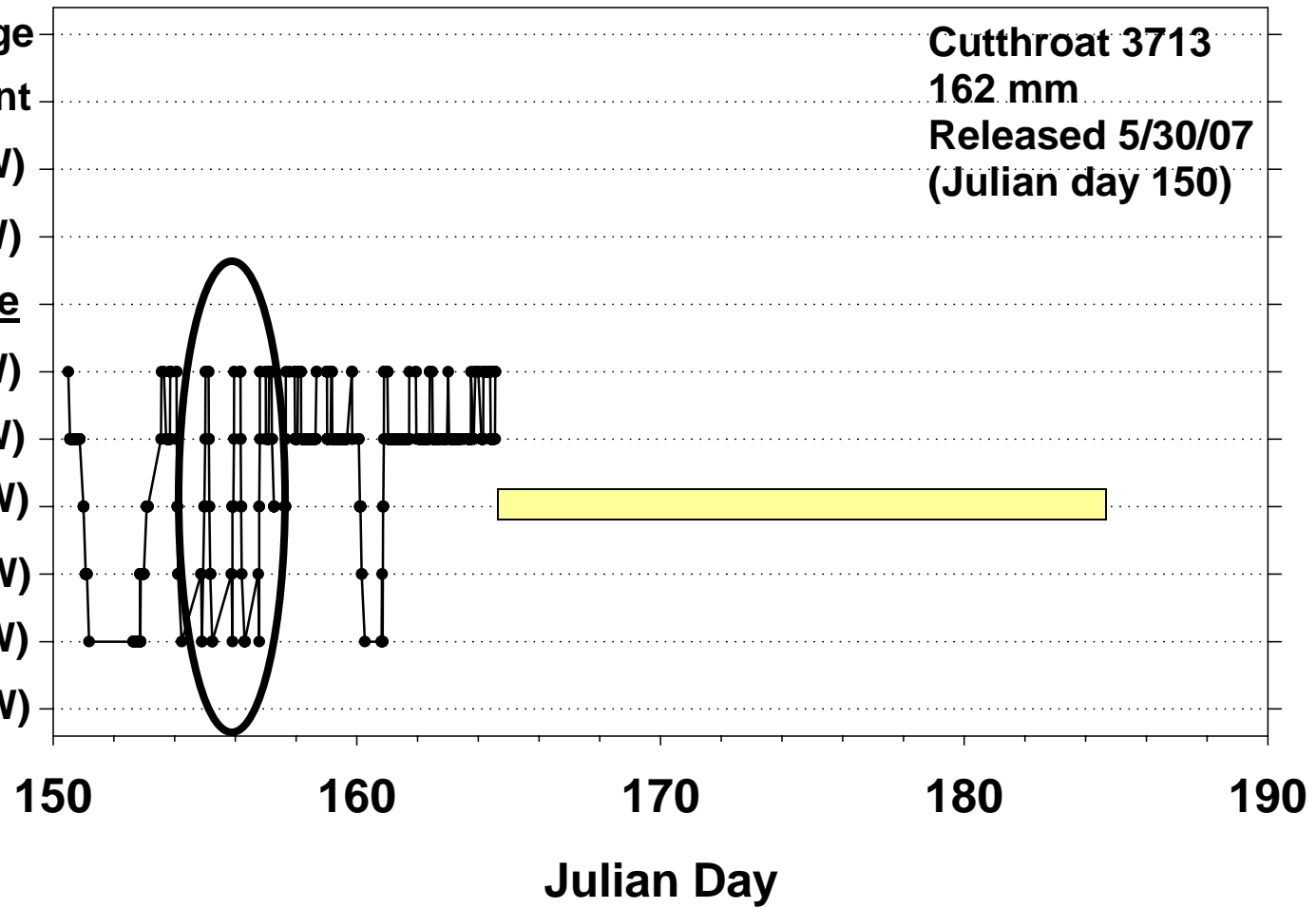
Charleston Bridge
Crown Point
DangerPt (NW)
Tom's (W)
Release site
Dalton (W)
Hinch Bridge (NW)
Cox Reach (W)
Fredrickson (NW)
Anderson (W)
Above trap (W)

Cutthroat 3710
160 mm
Released 5/30/07
(Julian day 150)



Charleston Bridge
Crown Point
DangerPt (NW)
Tom's (W)
Release site
Dalton (W)
Hinch Bridge (NW)
Cox Reach (W)
Fredrickson (NW)
Anderson (W)
Above trap (W)

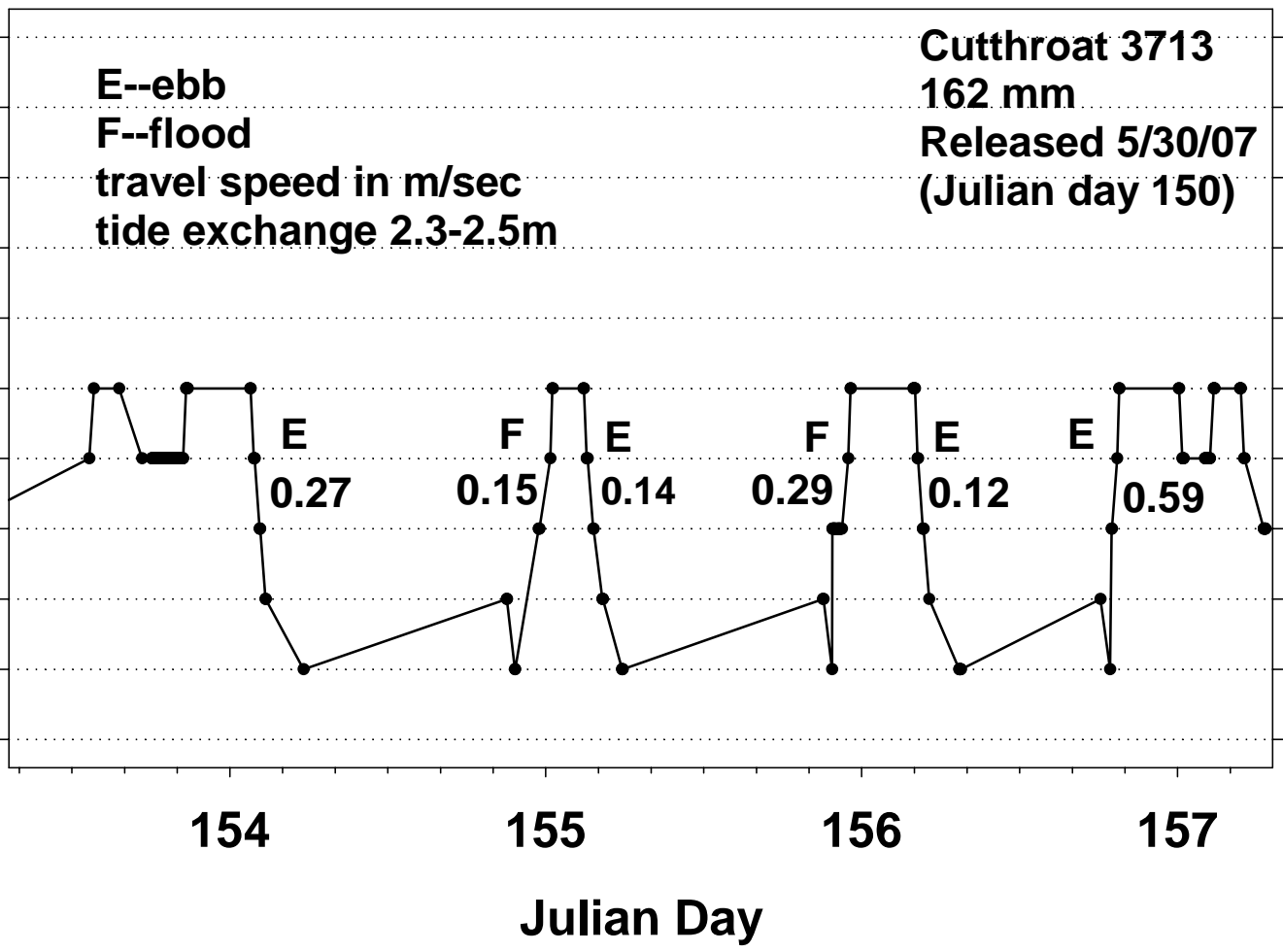
Cutthroat 3713
162 mm
Released 5/30/07
(Julian day 150)



Charleston Bridge
 Crown Point
 DangerPt (NW)
 Tom's (W)
Release site
 Dalton (W)
 Hinch Bridge (NW)
 Cox Reach (W)
 Fredrickson (NW)
 Anderson (W)
 Above trap (W)

E--ebb
 F--flood
 travel speed in m/sec
 tide exchange 2.3-2.5m

Cutthroat 3713
 162 mm
 Released 5/30/07
 (Julian day 150)



Preliminary Findings

Fish that moved upstream ranged 137-161mm FL

No detections in tributaries (Dalton Cr and Cox Canyon Cr beaver pond)

Smaller fish (135-145mm) remained above Hinch Bridge

Mid-size fish (150-170mm) ranged from Cox Reach downstream to Danger Pt

Fish spent more time near “wood” sites at Anderson, Cox and Dalton reaches, were transitory at no-wood sites

Fish move primarily with tidal flow, but there are exceptional exceptions