

Adult Anadromous Fish

Acoustic Investigations

Gordon Mueller (USGS)

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Funded by CalFed with assistance from IEP

Study Questions

- ➔ Do adult anadromous fish use the DCC? How many?**
- ➔ Are anadromous fish blocked in the DCC when the gates are closed?**

Methods

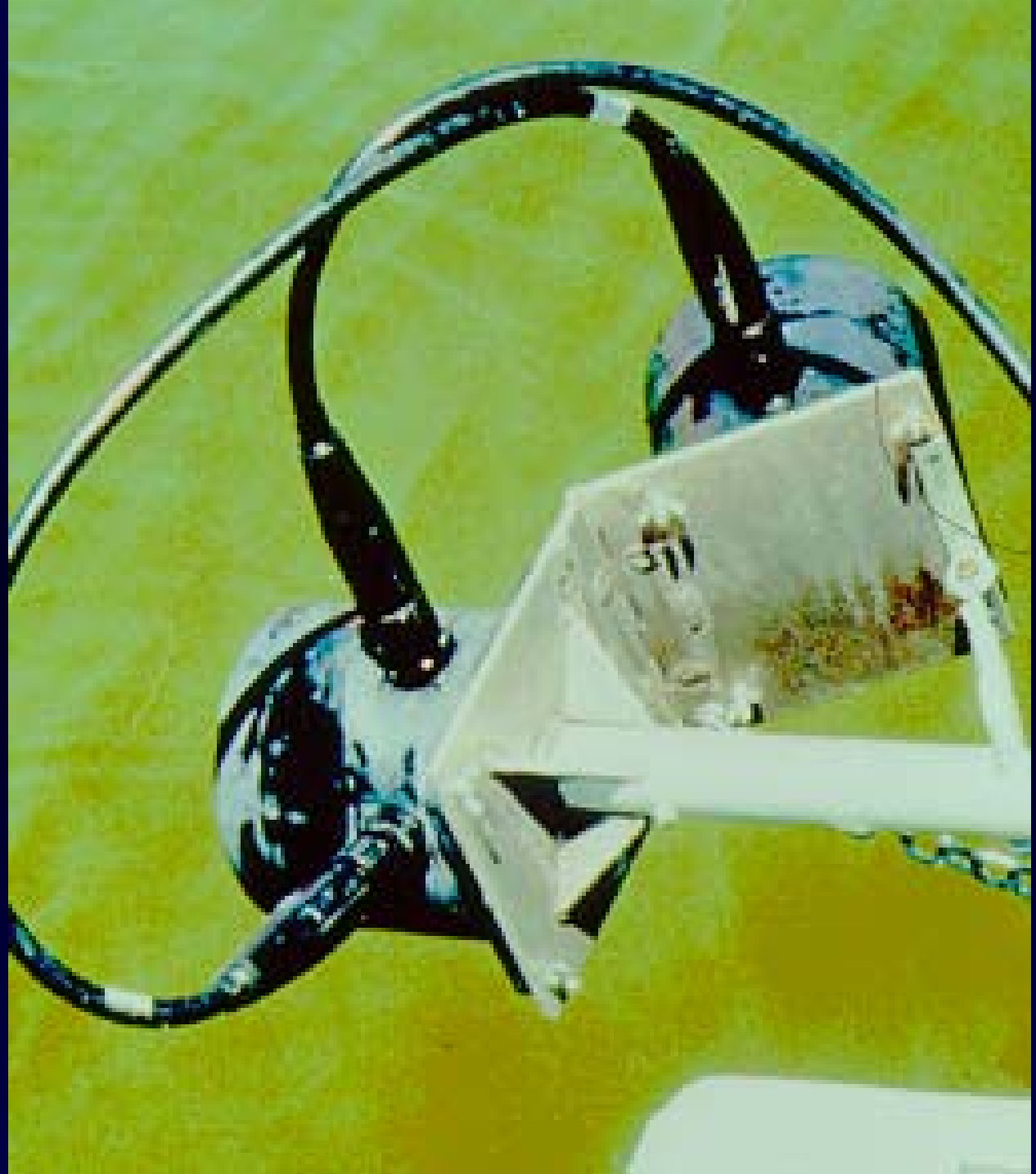
➔ Acoustic surveys upstream and downstream of DCC and in DCC



Methods

- ➔ 420 kHz echosounder
- ➔ zig-zagging transects from shore to shore



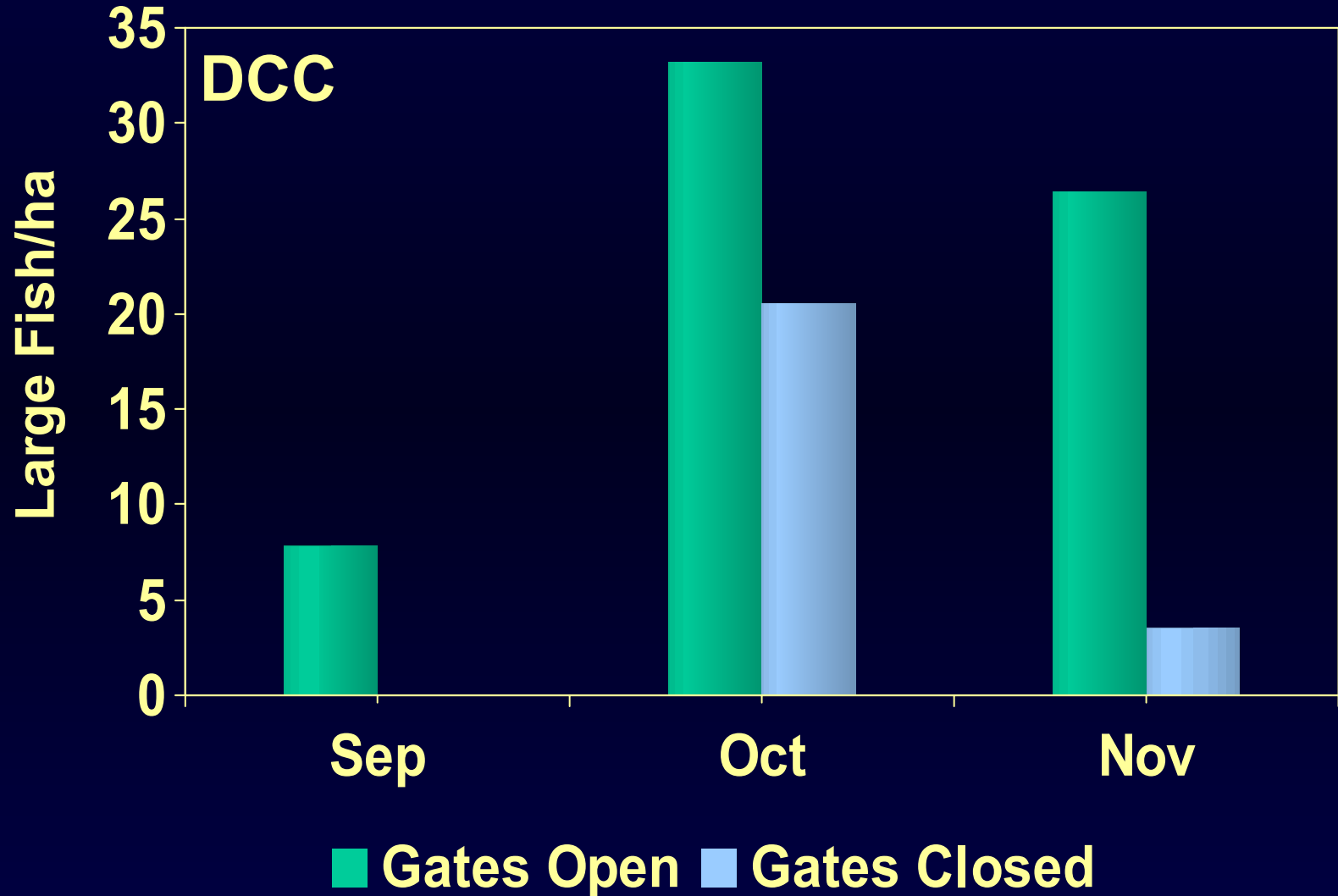


Results

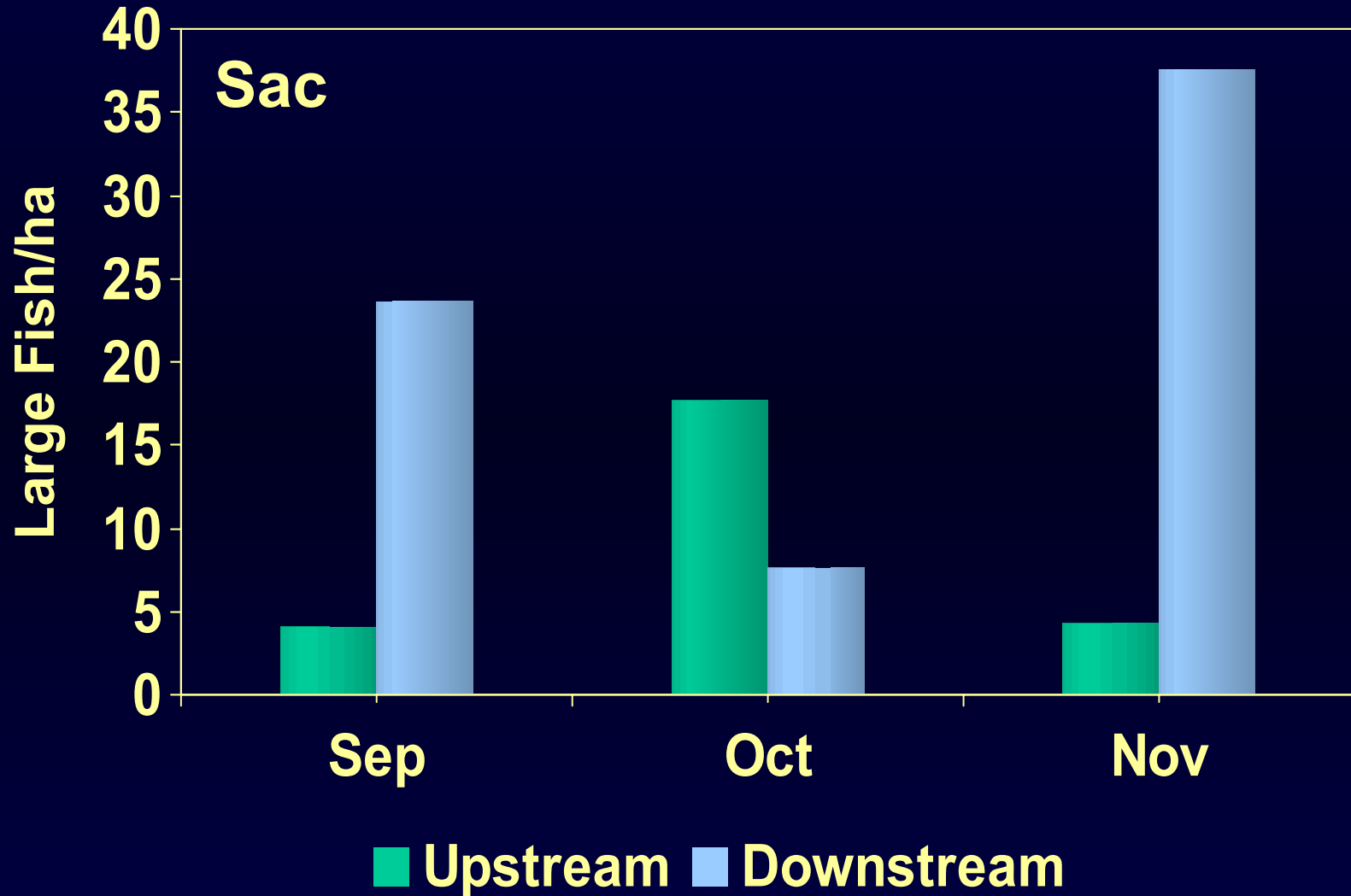
➔ 86 DCC surveys

➔ 35 Sac. River surveys

Large Fish Detection



Large Fish Detection



Adult Anadromous Fish

Fyke Trapping



Jeff McLain (USFWS)

Funded by CalFed with assistance from IEP

Study Questions

- ➔ What is the species composition of large fish in the DCC?**
- ➔ Are there adult anadromous fish in the DCC when the gates are closed?**

Methods









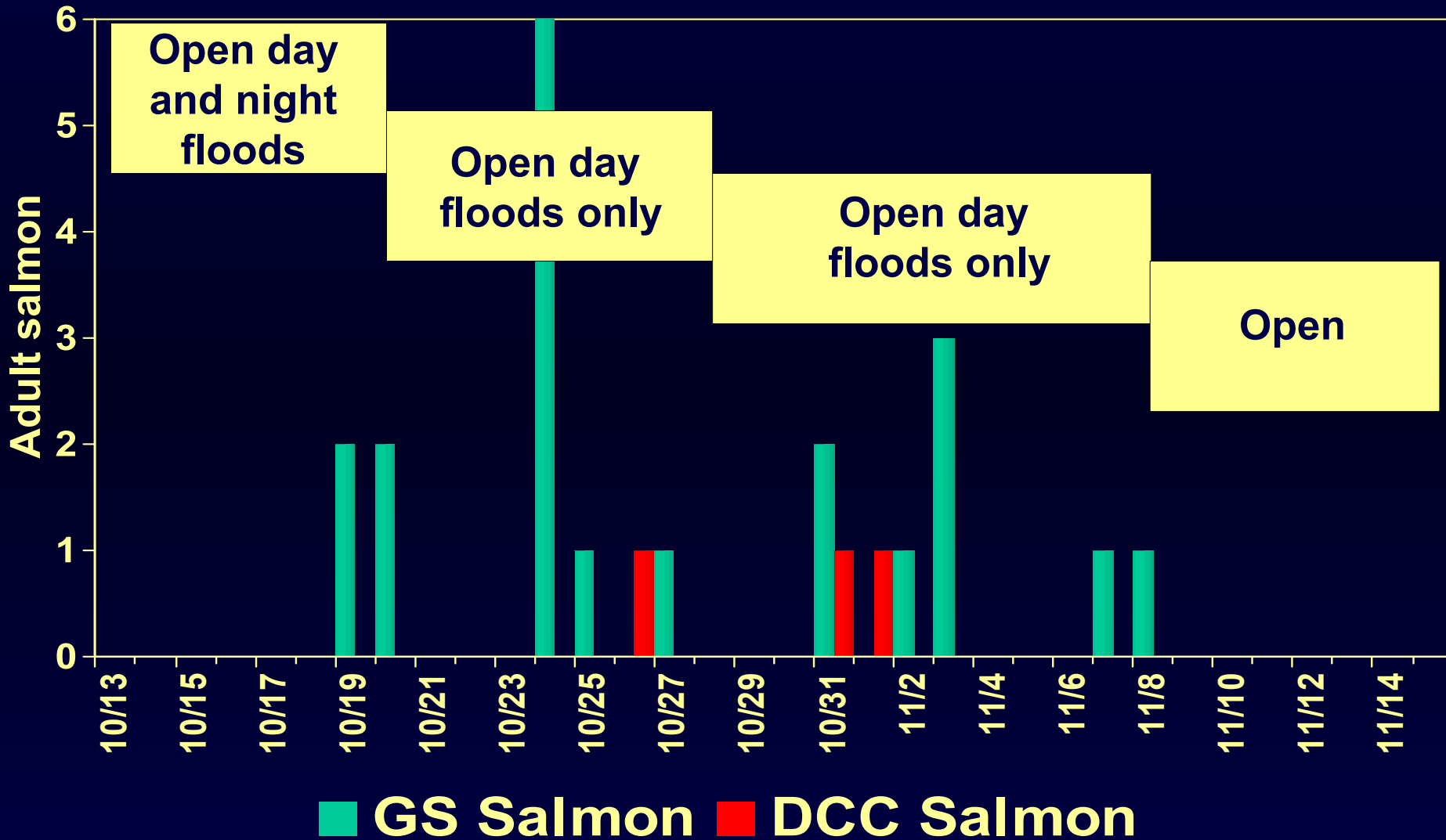


Results

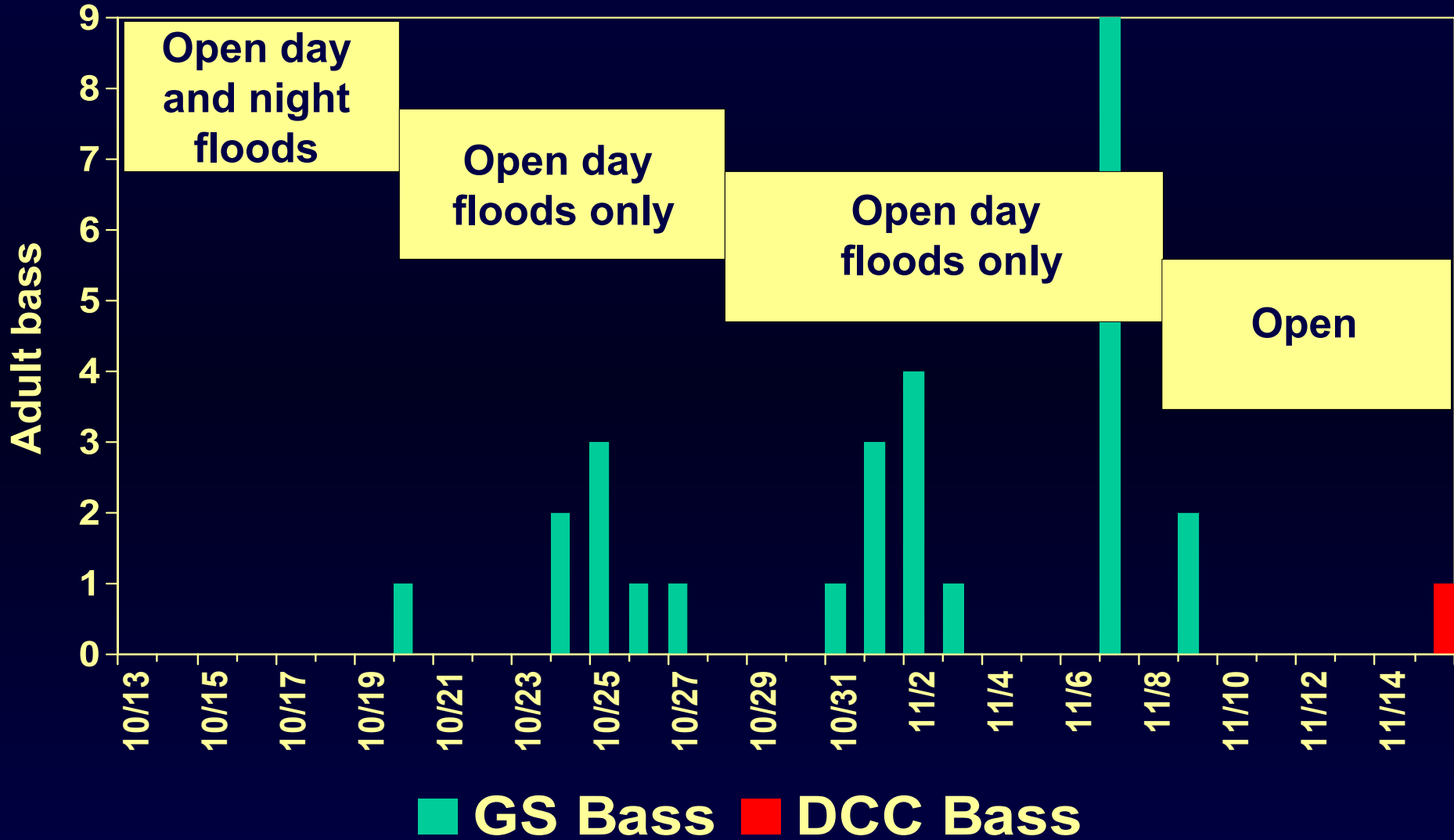
Species Captured Include:

	DCC	GS
Chinook Salmon	3	21
Striped Bass	1	28
Steelhead/trout (CLIP)	1	1
Redear Sunfish	13	9
Smallmouth Bass	5	8
Largemouth Bass	2	3
Spotted Bass	1	11
Channel Catfish	0	1

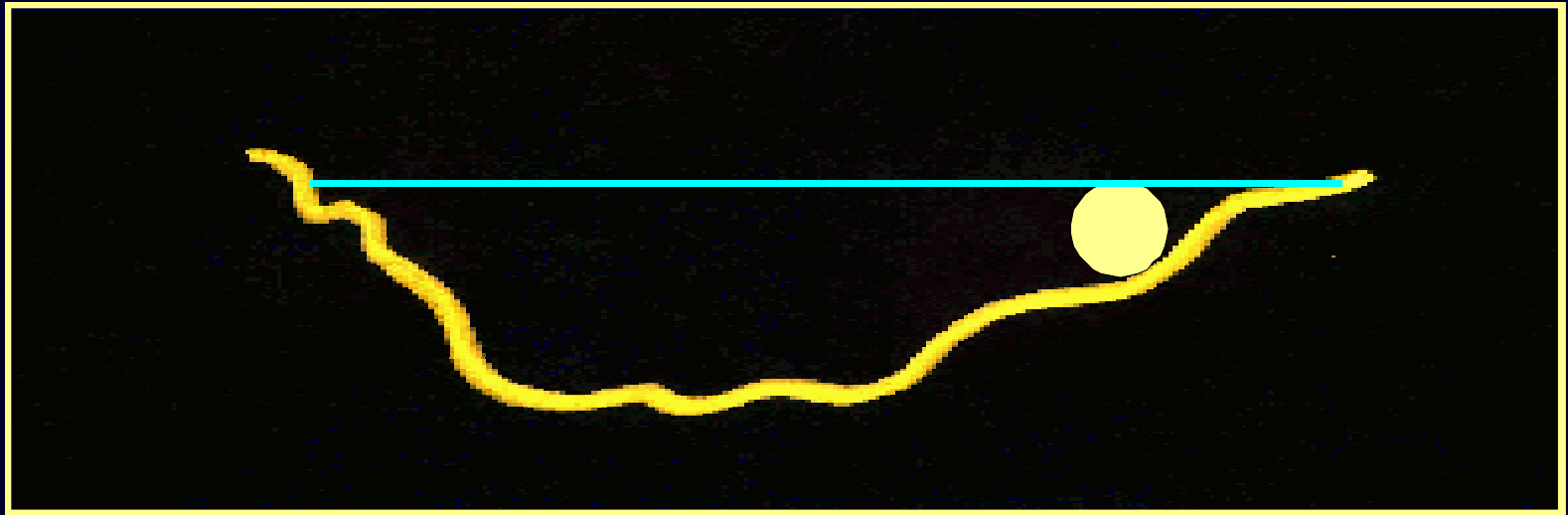
Chinook Salmon Catch



Striped Bass Catch



Trap Position - South DCC



Summary

- ➔ **Fyke trapping and acoustical surveys successful**
- ➔ **Salmon most common anadromous fish in DCC**
- ➔ **Striped bass second most common in DCC**
- ➔ **Resident fish account for many acoustical targets**
- ➔ **Densities higher when gates open**

Recommendations

- ➔ Increase fyke net effort**
- ➔ Trammel netting**
- ➔ Tidal and diel testing**
- ➔ Gate operation w/ fykes**

Acknowledgements

Dave Kohlhorst and Mike Harris, DFG

Michelle Lukkarila, DFG

Zach Hymanson, DWR

Beth Campbell, NMFS

Katie Perry, DFG

Andy Giannini, Brannan-Andrus Levee Maint. District.

FWS Field Crew

Bruce Oppenheim and Martha Volkoff, NMFS