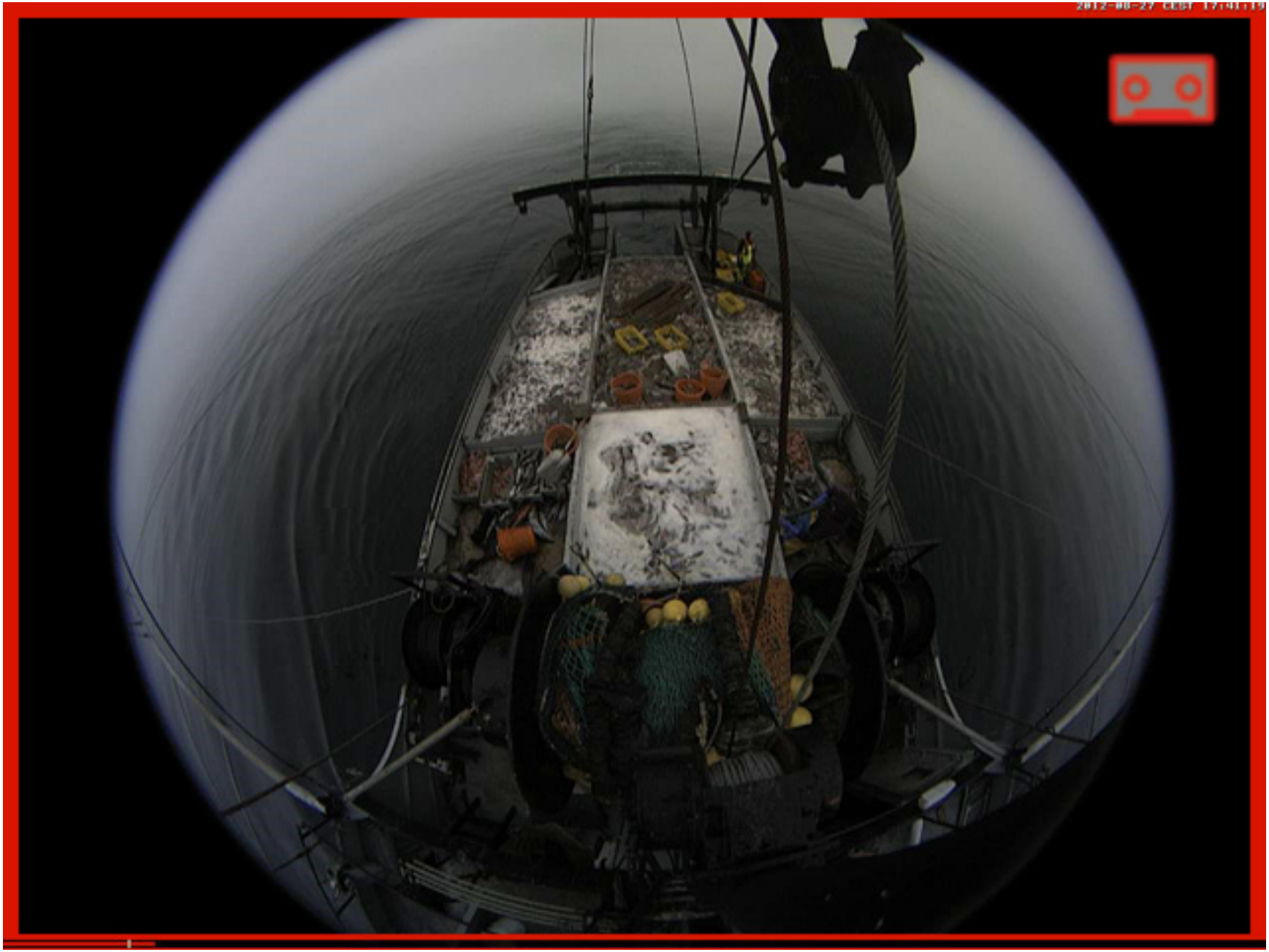
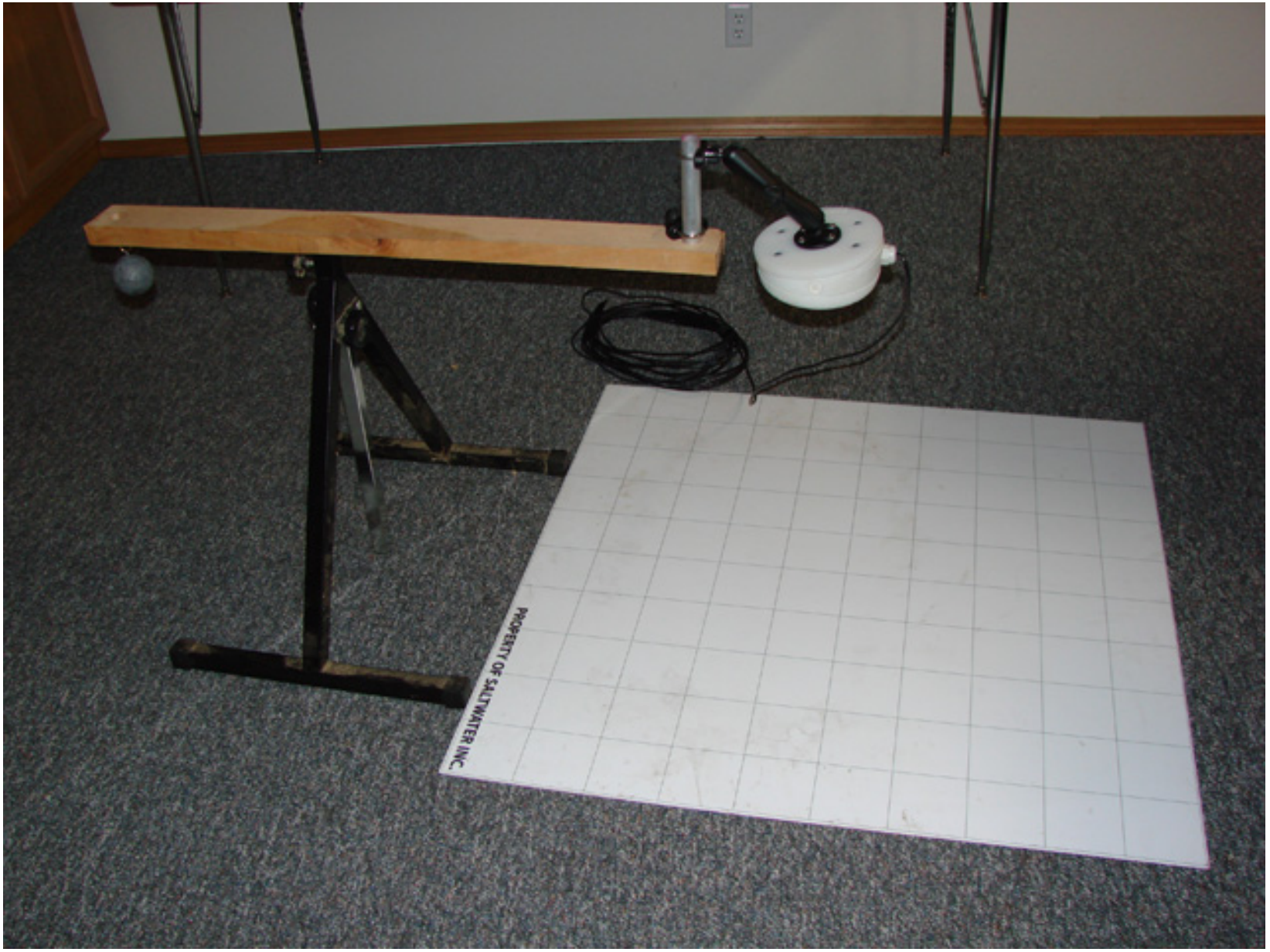
Summary of National Fish and Wildlife Foundation Grants to the FMA

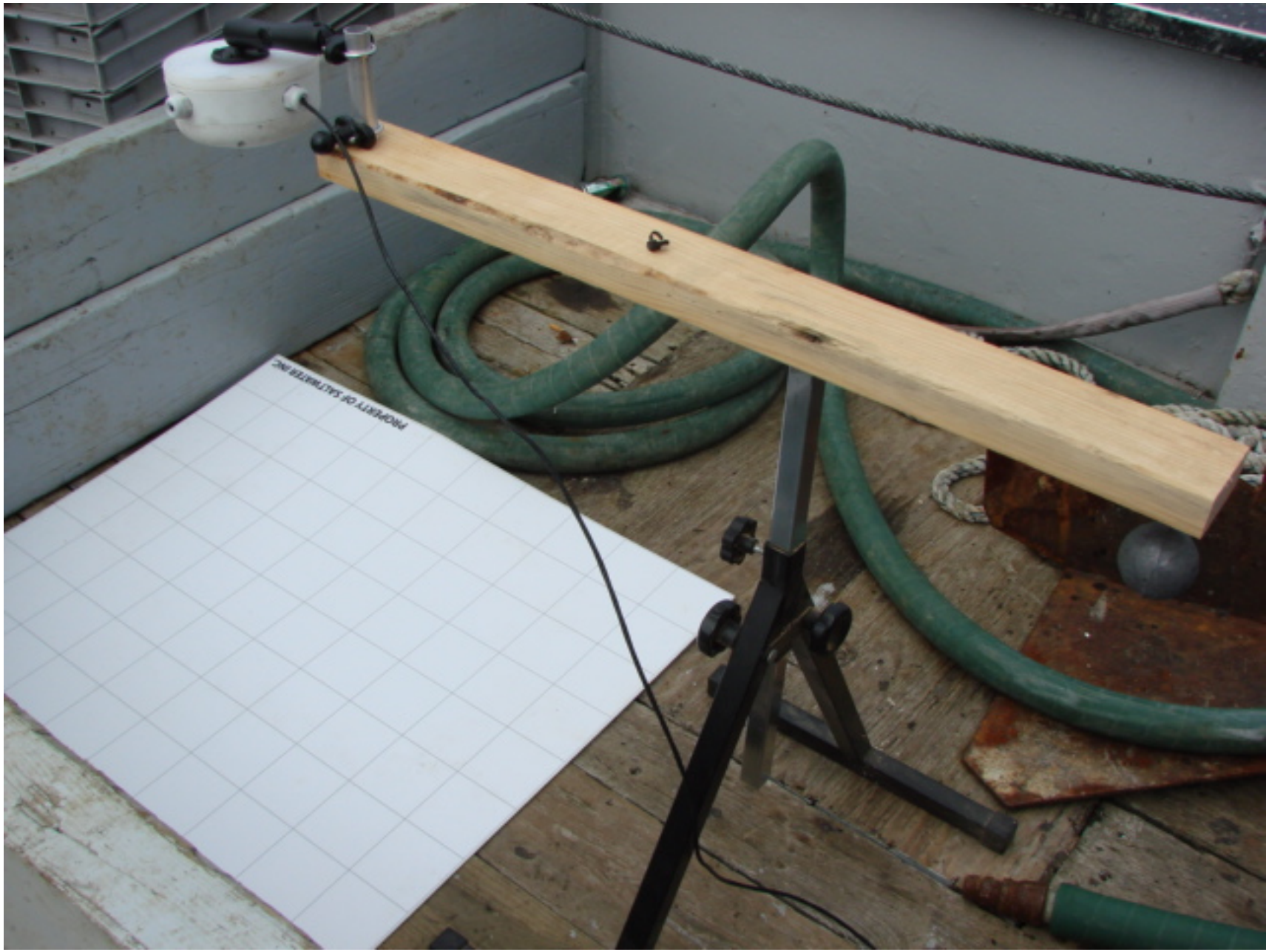
February 25, 2013

First Grant Question?

- Can video images allow humans to identify the species of fish?

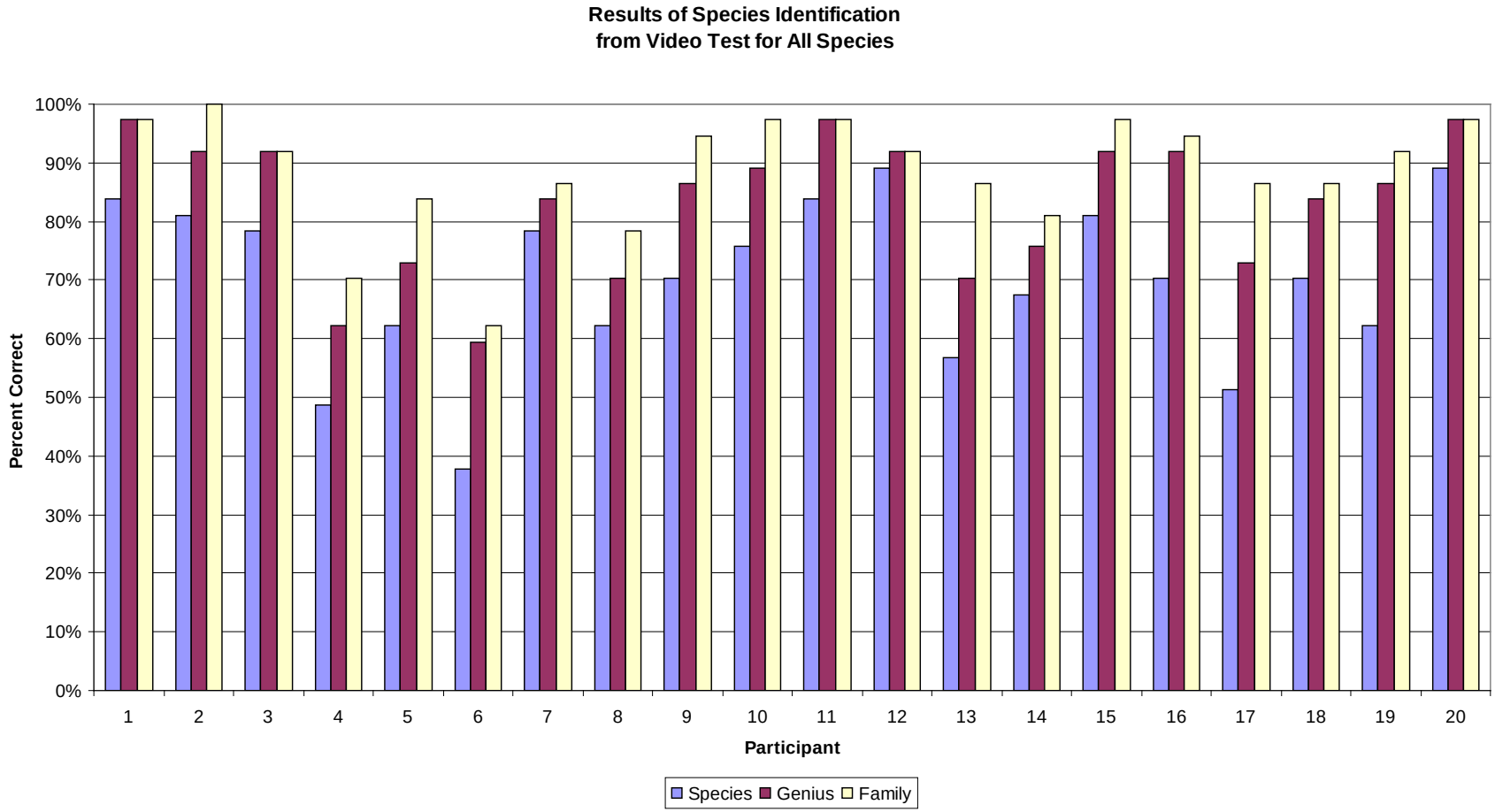


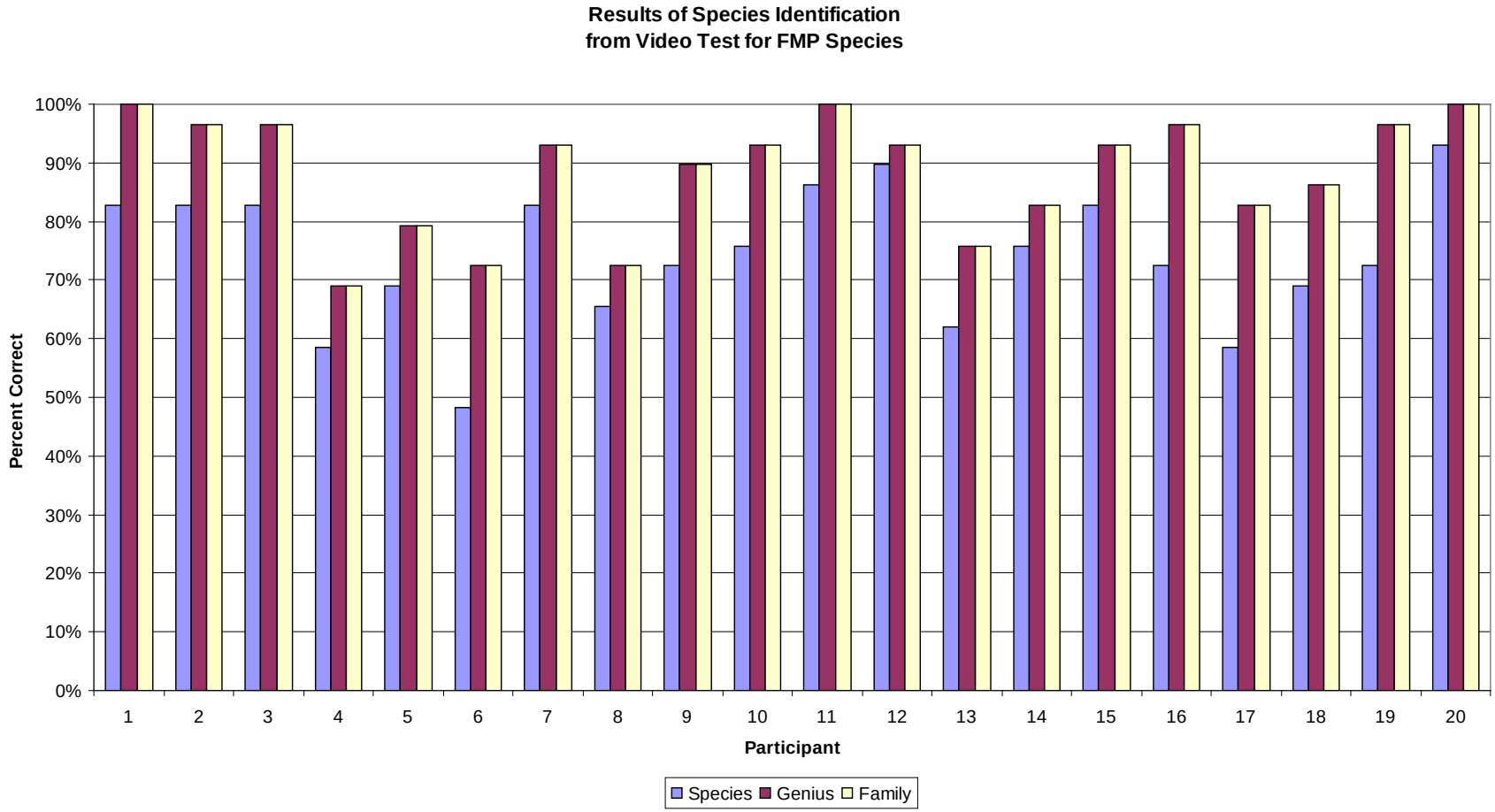

PROPERTY OF SALTWATER INC.

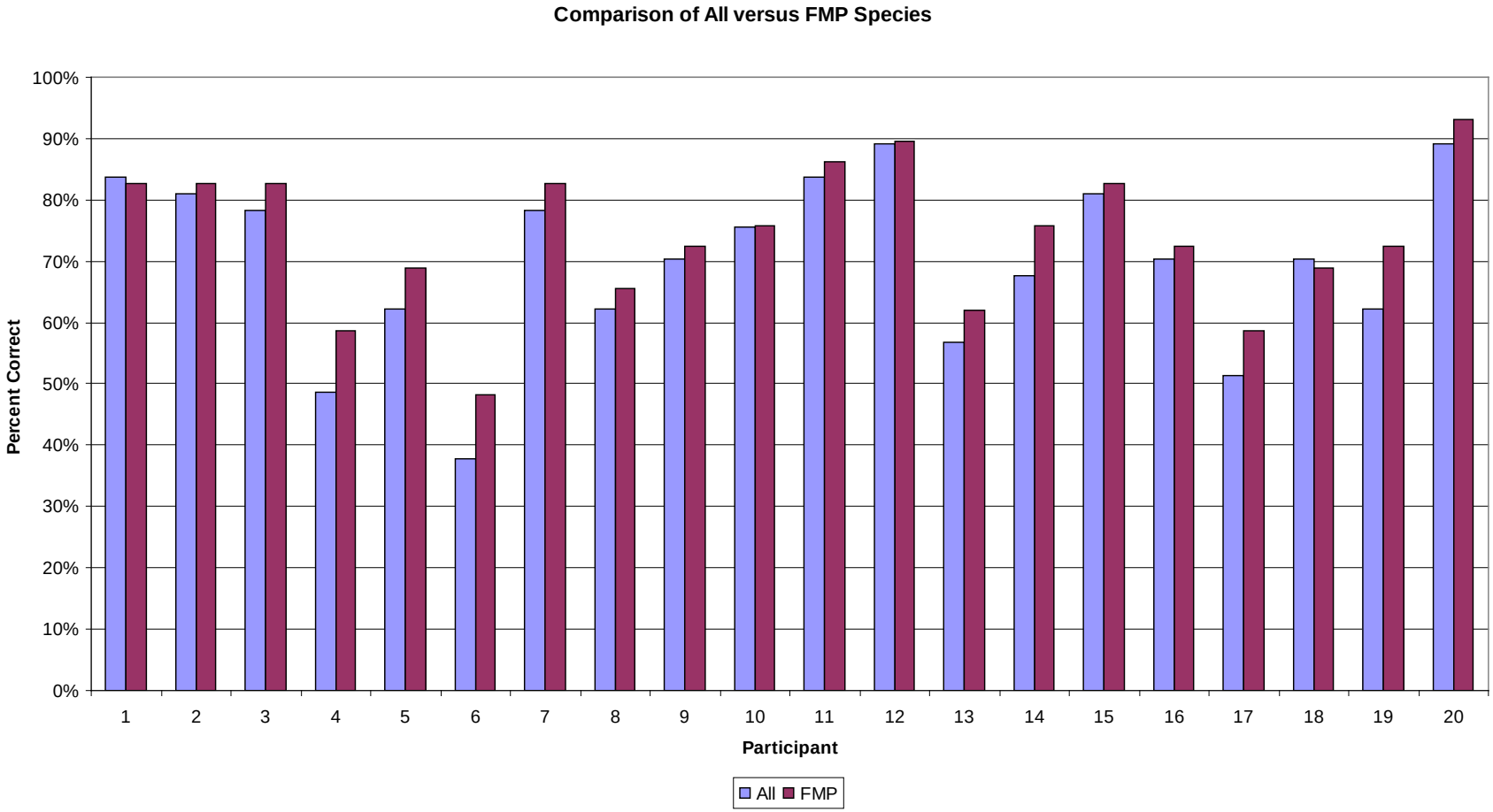

PROPERTY OF SALTWATER INC.

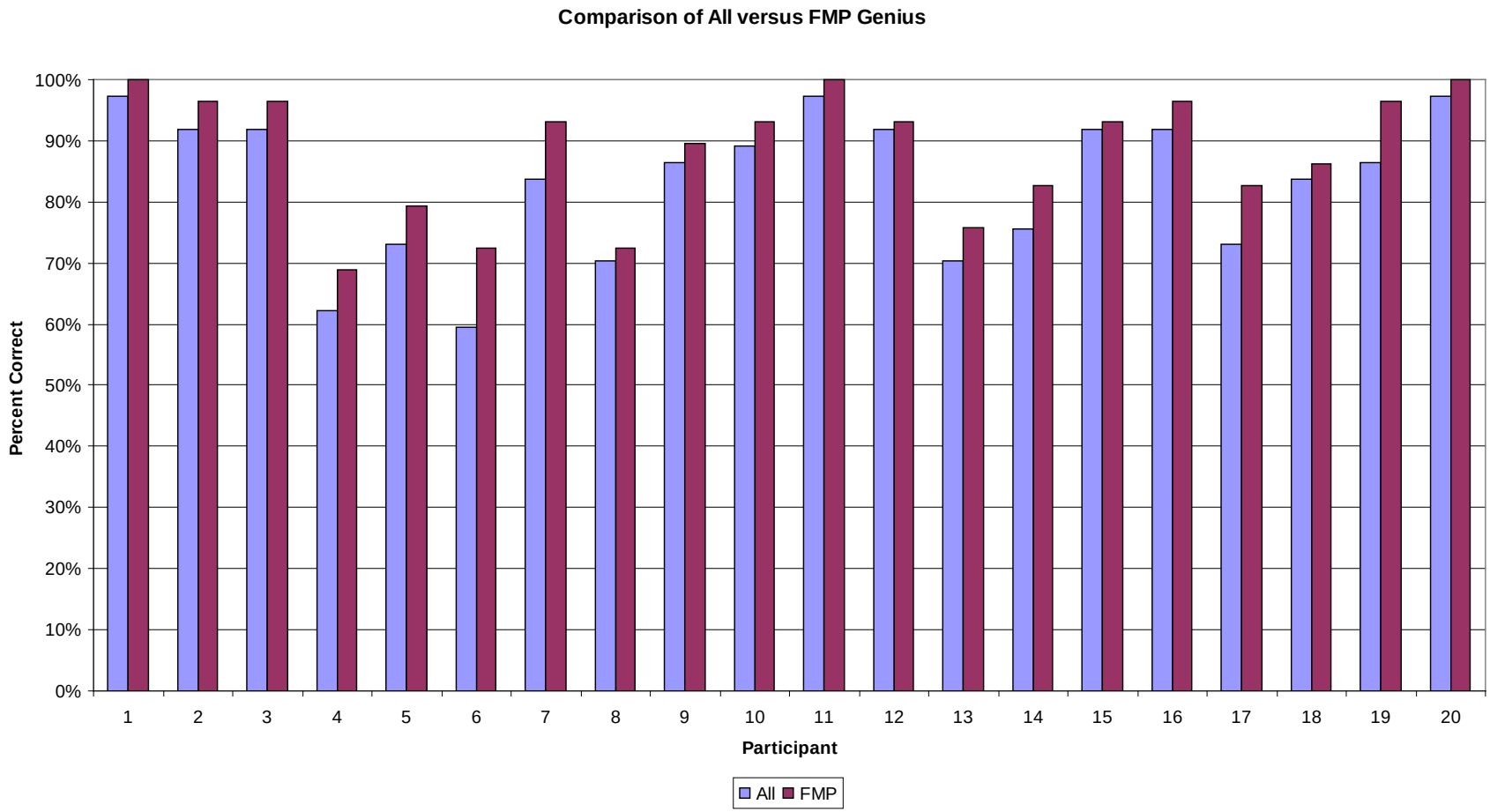
Test Video Formats

- avi
- wmv
- mpg
- mov
- asf


Results of Species Identification
from Video Test for All Species
Percent Correct
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Participant
Species
Genius
Family


Results of Species Identification
from Video Test for FMP Species
Percent Correct
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Participant
Species
Genius
Family


Comparison of All versus FMP Species
Percent Correct
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Participant
All
FMP


Comparison of All versus FMP Genius
Percent Correct
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Participant
All
FMP

Problems

- Lighting
- File format
- Media player

Answer to Question

- A conditional yes.

Second Grant Questions?

- Can software identify discard behavior on the back deck?

- Can software identify the species of fish which could be discarded?

Answer to Questions

- For both questions, it looks good at this time, but work is continuing.

Dr. Sinisa Todorovic

2107 Kelley Engineering Center
School of EECS
Oregon State University
Corvallis, OR 97331

541-737-7268