



Memorandum

To: ACL Board

Date: October 5, 2021

From: Megan Shamp

Memo #: 2021-83

Topic: October committee/commission changes

Recommendation: To appoint Sean Cottrell to the Legal Commission; LeAnne Killeen to the Recreation Commission; Mary Witt to the Budget Commission; Gordon Williams and Steve Borst as Co-Chairs and Jody Ware as Secretary of the Strategic/Long Range Planning Commission; Edie Petelle as Chair, Roger VanDerLeest as Vice Chair, and Jan Helgason as Secretary of the Appeals Board; and to accept the resignation of Todd Kintop from the Trails and Strategic/Long Range Planning Commissions.

Plan on a Page: Improvement of Infrastructure – To develop, maintain and improve the existing infrastructure.
High Performing Operations and Management - 1YAP – Provide on-going training of Board of Directors and staff on governing documents for consistency in decision-making.

Memorandum



To: ACL Board

Date: October 5, 2021

From: Megan Shamp

Memo #: 2021-77

Topic: Appeals Board decisions

Issue & Analysis: In accordance with the NFP Act, only committees comprised of at least two Board members, with the majority of the committee members being Board members, have the authority to act on behalf of the Association. All other committees are referred to as advisory bodies or commissions. The Appeals Board guidelines state that no member of the Appeals Board can be currently serving on the ACL Board of Directors. As such, the Appeals Board serves in an advisory capacity to the Board of Directors.

Recommendation: To accept the recommendation of the Appeals Board to uphold citation #4782 issued to Ginter, to suspend citation #4872 issued to Bathum, and to uphold citation #0012 issued to Vick.

*Plan on a Page: High Performing Operations and Management –
To operate at full efficiency and effectiveness for the benefit of the
Association*

**Apple Canyon Lake Property Owners Association
Appeals Board Meeting Minutes
September 11, 2021**

UNAPPROVED

1.0 Call to Order - Chairperson Edie Petelle opened the meeting at 8:40 am. Members present: Ron Beckel, Roger VanDerLeest, Janet Helgason, Edie Petelle, Tom Sheehan. Security: Julie Janssen, Jerid Gift, Dakota Mackall, Ray Wright.

2.0 Approve Minutes – The minutes of the previous meeting were voted on by a motion to accept by Ron and seconded by Jan. Motion passed.

3.0 Old Business – No discussion.

4.0 New Business – Election of Officers. Confirmed Edie Petelle as Chairperson, Roger VanDerLeest as Vice Chairperson, Jan Helgason as Secretary, and Tom Sheehan as new Appeals Board member.

5.0 Hearings

5.1 Hearing for Ginter – Chairperson Petelle explained the procedure of the hearing. Security Officers Julie and Jerid described the July 17, 2021 citation to property owner Mary Jo Ginter. Property Owner Ginter spoke and presented her appeal to the citation. Then the meeting was open to questions from the Appeals Board members and Safety & Security officers. The Appeals Board went into executive session. The Appeals Board's decision was to uphold the citation. It was explained that she had the right to appeal the upheld citation to the Board of Directors. Ms. Ginter decided to take it to the Board.

5.2 Hearing for Bathum - Chairperson Petelle explained the procedure of the hearing. Security Officer Dakota Mackall described the August 14, 2021 citation to property owner Kathie Bathum. Property Owner Bathum spoke and presented her appeal to the citation. Then the meeting was open to questions from the Appeals Board members and Safety & Security officers. The Appeals Board went into executive session. The Appeals Board's decision was to suspend the citation.

5.3 Hearing for Vick - Chairperson Petelle explained the procedure of the hearing. Security Officer Ray Wright described the August 17, 2021 citation to property owner Jonathan Vick. Property Owner Vick spoke and presented his appeal to the citation. Then the meeting was open to questions from the Appeals Board members and Safety & Security officers. The Appeals Board went into executive session. The Appeals Board's decision was to uphold the citation. It was explained that he had the right to appeal the upheld citation to the Board of Directors. Mr. Vick decided to pay the citation.

6.0 Next Meeting Date – To be determined.

7.0 Adjournment – Meeting adjourned at 10:40.

Respectfully submitted,
Janet Helgason, Secretary

Memorandum



To: ACL Board

Date: October 6, 2021

From: Shaun Nordlie

Memo #: 2021-90

Topic: Recording Association Meetings

Issue & Analysis: With the Association using Zoom now for all Board of Directors meetings, we have had requests from owners to start recording the monthly Board meetings and make them available on the Association website. A policy needs to be adopted to lay out the procedure for the recording and the length of time that the recording will be available on the website. The recording will only be on the private side of the website where a member log in is required to access the recording.

Recommendation: To approve Board Policy 7540.03 as included in the October Board packet.

Plan on a Page: High Performing Operations and Management: To operate at full efficiency and effectiveness for benefit of the Association.

SECTION 7000

7540.03 – RECORDING OF BOARD OF DIRECTORS' MEETINGS

It is the policy of the Board of Directors that their open meetings will be recorded via a web-conference meeting platform, such as Zoom, Webex, GoToMeeting, or other electronic recording device. Members will have the opportunity to view the recording of the meeting for twenty-five (25) calendar days after the meeting.

At the beginning of each open meeting, after the meeting is called to order, the Board President or designee, will read the following statement: ***As permitted by Illinois law, all open portions of this board meeting are being recorded and will be posted on the Association's website. By attending and participating in this meeting, you are consenting to be recorded.*** The purpose of this statement is to alert all participants and guests of the meeting that the meeting is being recorded.

The recording will be added to the Association's website under the Board of Directors' page (<https://applecanyonlake.org/group/pages/board-of-directors>) on the Monday or first business day following the Board Meeting. The recording will be destroyed at the time of removal from the website.

CROSS-REFERENCES:

ADOPTED:

LAST REVISED:



Memorandum

To: Board of Directors

Date: October 5, 2021

From: Budget Commission

Memo: 2021-87

Topic: adoption of the 2022 Operating Budget

Issue: Per CICAA, the budget must be advertised for a minimum of 30 days prior to the Board adopting the budget. The 2022 Operating Budget was published in the September issue of *The Apple Core*. The Board is now able to adopt the 2022 Operating Budget.

Recommendation: To adopt the 2022 Operating Budget as published in the September issue of *The Apple Core*.

Plan on a Page: High Performing Operations and Management -To operate at full efficiency and effectiveness for the benefit of the Association.

ACLPOA 2022 Operating Budget - approved for publication 8/21/21

	2022 Budget	2021 Budget	2020 Audited	2019 Audited		
1	3000	Asset Preservation Funds				
2	3100	Membership Assessment - Operating	\$ 1,918,167.00	\$ 1,737,419.00	\$ 1,715,591	\$ 1,604,342
	3101	Membership Assessment - Capital Projects	\$ 500,000.00	\$ 682,356.00	\$ 608,000	\$ 222,498
	3102	Membership Assessment - R & R	\$ 537,000.00	\$ 535,000.00	\$ 559,000	\$ 800,208
	3105	Property Transfer Fee	\$ -	\$ -	\$ -	\$ -
4	3110	Delinquent Dues Fee	\$ 29,250.00	\$ 21,500.00	\$ 23,975	\$ 21,300
5	3115	Interest - Delinquent Dues	\$ 915.00	\$ 915.00	\$ -	\$ 1,447
	3116	Foreclosure Fee Income	\$ -	\$ -	\$ -	\$ -
6	3120	Banking Income	\$ 12,000.00	\$ 9,750.00	\$ 13,794	\$ 25,924
7	3135	Lease Rental Revenue	\$ 60,739.00	\$ 66,739.00	\$ 61,466	\$ 81,575
8	3150	ACL Seasonal Boat Slips/Campsites	\$ 217,075.00	\$ 204,675.00	\$ 203,160	\$ 205,230
	3142	Owner Amenity Registration Fee (OARF)	\$ 285,000.00	\$ 285,000.00	\$ 288,100	\$ 283,800
9	3170	Registration Fees	\$ 86,675.00	\$ 38,850.00	\$ 20,630	\$ 20,865
10	3180	Counter Sales/Vending Income	\$ 2,605.00	\$ 2,185.00	\$ 1,331	\$ 3,835
11	3190	Contribution Income	\$ -	\$ -	\$ -	\$ -
	3193	Payment Plan Program Fees	\$ 8,800.00	\$ 8,175.00	\$ 8,470	\$ 7,755
12	3195	Gain/Loss Equipment Disposal	\$ -	\$ -	\$ -	\$ (39,786)
13	3196	Bad Debt Recovery	\$ -	\$ -	\$ 5,329	\$ 8,598
14	3198	Over Payments - Property Owners	\$ -	\$ -	\$ -	\$ -
15	3199	Credit Card Convenience Fee	\$ 3,000.00	\$ 3,300.00	\$ 3,201	\$ 3,587
16	3200	Program Fees	\$ 11,500.00	\$ 11,500.00	\$ 12,125	\$ 12,550
17	3210	Advertising Income	\$ 127,980.00	\$ 128,480.00	\$ 124,100	\$ 126,387
18	3230	Social Recreation Income	\$ 22,600.00	\$ 26,100.00	\$ 2,161	\$ 23,492
19	3250	Clubhouse Rental	\$ 4,375.00	\$ 4,375.00	\$ 400	\$ 3,925
20	3300	Building Permits & Septic Programs	\$ 14,490.00	\$ 9,290.00	\$ 15,405	\$ 9,443
21	3400	Trash & Recycling	\$ 116,005.00	\$ 124,238.34	\$ 77,230	\$ 75,820
22	3500	Pool Parties & Swimming Lessons	\$ 8,525.00	\$ 10,125.00	\$ 510	\$ 7,780
23	3515	Camping Fees	\$ 15,966.00	\$ 13,966.00	\$ 15,761	\$ 13,212
24	3535	Boat Rentals	\$ 27,500.00	\$ 34,400.00	\$ 58,982	\$ 35,555
25	3539	Boat Slip Rentals	\$ 6,475.00	\$ 5,850.00	\$ 5,300	\$ 5,290
26	3540	Fines Collected, NSF Check Fee	\$ 105.00	\$ 105.00	\$ 5,086	\$ 4,640
27	3600	Golf Fees/Golf Season Passes	\$ 138,100.00	\$ 134,350.00	\$ 130,183	\$ 116,289
28	3625	Golf Advertising Income	\$ 1,600.00	\$ 1,600.00	\$ 1,000	\$ 1,000
29	3650	Golf Misc Sales Income	\$ 8,500.00	\$ 8,500.00	\$ 6,995	\$ 16,901
30	3641	Golf Food & Beverage Income	\$ 205,100.00	\$ 205,100.00	\$ 170,124	\$ 217,990
31	3670	Marina Concessions Income	\$ 241,420.00	\$ 266,800.00	\$ 212,300	\$ 234,306
32	3680	Land & Lake Income	\$ 2,000.00	\$ 2,000.00	\$ 7,682	\$ 15,180
33	3700	Special Projects (319 Grant Revenue)	\$ 2,500.00	\$ 2,500.00	\$ 2,084	\$ 2,583
34	3260	Fundraisers (will be moved to des.funds)	\$ -	\$ -	\$ 6,409	\$ 21,756
35	3950	Employee Dishonesty Insurance Payout	\$ -	\$ -	\$ -	\$ -
		PPP Loan Forgiveness	\$ -	\$ -	\$ -	\$ -
		Total Revenue	\$ 4,615,967.00	\$ 4,585,143.34	\$ 4,707,409	\$ 4,195,277
			\$ -	\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -	\$ -
36	5000	Department Salaries	\$ -	\$ -	\$ -	\$ -
37	5025	Department Payroll	\$ 1,717,971.07	\$ 1,525,858.23	\$ 1,461,490	\$ 1,458,848
38		Overtime Wages	\$ -	\$ -	\$ -	\$ -
39	5050	Payroll Tax	\$ 150,688.00	\$ 128,724.97	\$ 121,561	\$ 122,930
40		Total Payroll Expenses	\$ 1,868,659.07	\$ 1,654,583.20	\$ 1,583,051	\$ 1,581,779
41	5060	Contract Labor	\$ 25,550.00	\$ 24,390.00	\$ 16,976	\$ 24,980
42	5100	Recruitment Expenses	\$ 1,450.00	\$ 1,450.00	\$ 435	\$ 1,961
43	5125	Employee Fringes	\$ 284,262.00	\$ 252,707.74	\$ 221,841	\$ 240,981
44	5150	Uniforms/Name Tags	\$ 9,300.00	\$ 8,150.00	\$ 6,233	\$ 5,438
45	5175	Conference/Training	\$ 16,600.00	\$ 16,600.00	\$ 4,795	\$ 12,010
46	5190	Credit Card Expenses	\$ 19,000.00	\$ 19,000.00	\$ 20,012	\$ 19,056
47	5195	DDS (Dues, Donations, Subscriptions)	\$ 9,560.00	\$ 7,934.80	\$ 6,990	\$ 8,244
48	5200	FF/E (Furniture/Fixture/Equipment)	\$ 13,900.00	\$ 13,400.00	\$ 13,380	\$ 15,051
49	5230	Program Refunds-Expense	\$ -	\$ -	\$ -	\$ -
50	5240	Registration Expenses	\$ 9,500.00	\$ 11,500.00	\$ 10,269	\$ 7,550
51	5250	Counter/Vending Supplies	\$ 300.00	\$ 200.00	\$ 648	\$ 1,971
52	5260	Office Supplies	\$ 8,600.00	\$ 8,200.00	\$ 4,779	\$ 8,339
53	5280	General Supplies	\$ 22,650.04	\$ 21,650.04	\$ 17,253	\$ 26,620
54	5300	Sales Tax	\$ -	\$ -	\$ -	\$ -
55	5303	Golf Food & Beverage	\$ 88,842.00	\$ 88,842.33	\$ 89,536	\$ 112,078
56	5305	Supplies for Resale	\$ 155,334.00	\$ 172,699.00	\$ 137,760	\$ 184,778
57	5349	Boat Rental Expenses	\$ -	\$ -	\$ 2,173	\$ (53)
			\$ -	\$ -	\$ -	\$ -
59	5370	Golf Cart Rentals	\$ 16,500.00	\$ 15,000.00	\$ 15,939	\$ 15,121
60	5400	Advertising	\$ 88,250.00	\$ 86,500.00	\$ 85,137	\$ 78,375
61	5425	Gift Certificates - Donated	\$ -	\$ -	\$ 105	\$ -
62	5450	Postage	\$ 13,000.00	\$ 20,000.00	\$ 13,778	\$ 1,369
63	5460	Rental Equipment	\$ 7,515.00	\$ 9,015.24	\$ 12,619	\$ 11,199
64	5495	Social/Recreation Expenses	\$ 18,925.00	\$ 17,875.00	\$ 5,777	\$ 26,679
65	5500	Clubhouse Rental Expenses	\$ -	\$ -	\$ 125	\$ 1,175
66	5510	Maintenance - Equipment	\$ 38,250.00	\$ 40,500.00	\$ 33,243	\$ 45,393
67	5525	Maintenance - Grounds	\$ 95,500.00	\$ 105,700.00	\$ 85,724	\$ 77,628
68	5550	Maintenance - Buildings	\$ 29,800.00	\$ 27,800.00	\$ 29,789	\$ 28,255
69	5575	Maintenance - Vehicles	\$ 14,600.00	\$ 14,600.00	\$ 9,464	\$ 13,312
		Fitness center expenses, tennis court, archery	\$ 700.00	\$ 700.00	\$ 207	\$ -
70	5600	Gas & Oil	\$ 58,450.00	\$ 58,450.00	\$ 38,364	\$ 47,777
71	5625	Scavenger Services	\$ 42,000.00	\$ 42,000.00	\$ 46,354	\$ 38,610
72	5650	Licenses/Permits	\$ 5,050.00	\$ 5,950.00	\$ 6,129	\$ 5,958
73	5675	Membership/Employee Recognition	\$ 6,000.00	\$ 6,000.00	\$ 4,153	\$ 6,610
74	5685	Hardware/Software Support	\$ 64,360.00	\$ 30,000.00	\$ 17,708	\$ 35,926
75	5692	Audit Consulting Costs	\$ -	\$ -	\$ -	\$ -
76	5695	Legal Services	\$ 46,500.00	\$ 43,000.00	\$ 54,006	\$ 41,371
77	5480	Accounting Services	\$ 6,000.00	\$ 5,000.00	\$ 5,756	\$ 5,380
78	5700	Vehicle Licenses	\$ 4,000.00	\$ 4,450.00	\$ 3,334	\$ 2,522
79	5785	Bad Debts-Current Year	\$ 134,000.00	\$ 126,000.00	\$ 139,868	\$ 74,412
80	5800	Utilities	\$ 144,019.00	\$ 132,616.00	\$ 111,540	\$ 139,591
81	5815	Insurance	\$ 182,455.90	\$ 185,874.00	\$ 179,720	\$ 176,949
82	5820	Property Taxes	\$ 41,050.00	\$ 41,250.00	\$ 38,939	\$ 39,275
83	5840	Lake Sediment Pond Expenses	\$ 5,000.00	\$ 5,000.00	\$ -	\$ 3,488
84	5850	Lake Dredge Expenses	\$ 20,700.00	\$ 20,700.00	\$ 37,612	\$ 27,204
85	5895	Special Projects	\$ 15,500.00	\$ 22,500.00	\$ 14,398	\$ 23,197
86	5710	Fundraisers	\$ -	\$ -	\$ 2,433	\$ 12,130
87	5896	Contingency Fund	\$ -	\$ -	\$ -	\$ -
88	5897	Contingency for potential rev. shortfalls	\$ -	\$ -	\$ -	\$ -
89	5995	Auto Inclusion	\$ -	\$ -	\$ -	\$ -
90	5035	Pavilion Expenses	\$ -	\$ -	\$ -	\$ -
91	5686	Banking Fees	\$ -	\$ -	\$ 76	\$ 1,865
92	5996	Misc Expense	\$ -	\$ -	\$ 8,463	\$ 7,145
93	5997	Interest Expense	\$ -	\$ -	\$ -	\$ -
94	5998	Penalties & Fines	\$ -	\$ -	\$ -	\$ -
		Subtotal Expenses	\$ 3,631,632.01	\$ 3,367,787.35	\$ 3,136,893	\$ 3,238,700
95	5870	Designated Funds Transfers	\$ -	\$ -	\$ 4,725	\$ -
96		R & R Fund Contribution	\$ 537,000.00	\$ 535,000.00	\$ 559,000	\$ 800,000
97		Capital Projects	\$ 500,000.00	\$ 682,356.00	\$ 608,000	\$ 222,272
		Total Operating Fund Exp. & Transfers	\$ 4,668,632.01	\$ 4,585,143.35	\$ 4,303,893	\$ 4,189,938
			\$ -	\$ -	\$ -	\$ -
		Total Revenue	\$ 4,615,967.00	\$ 4,585,143.34	\$ 4,707,409	\$ 4,189,938
		Total Direct & Indirect Expenses	\$ 4,668,632.01	\$ 4,585,143.35	\$ 4,303,893	\$ 4,189,938
		Excess Revenues	\$ (52,665.01)	\$ (0.01)	\$ 403,516	\$ (4,800)
		Depreciation	\$ -	\$ -	\$ 635,773	\$ (658,341)
		Net Income	\$ (52,665.01)	\$ (0.01)	\$ (232,257)	\$ 293,437
		Less Asset Preservation Funds	\$ -	\$ -	\$ -	\$ -
		State/Federal Income Tax Expense	\$ -	\$ -	\$ -	\$ -
		Revenue/Expenses	\$ (52,665.01)	\$ (0.01)	\$ (232,257)	\$ (0)

Memorandum



To: Board of Directors

Date: October 5, 2021

From: Budget Commission

Memo: 2021-88

Topic: adoption of the 2022 R & R Budget

Issue: Per CICA, the budget must be advertised for a minimum of 30 days prior to the Board adopting the budget. The 2022 R & R Budget was published in the September issue of *The Apple Core*. The Board is now able to adopt the 2022 R & R Budget.

Recommendation: To adopt the 2022 R & R Budget as published in the September issue of *The Apple Core*.

Plan on a Page: High Performing Operations and Management -To operate at full efficiency and effectiveness for the benefit of the Association.

2022 R&R Budget - approved for publication 8/21/21

Lake		\$ 155,000
	Streambank Stabilization Dry Dam Repair and Installation Erosion Control Projects 32 New Boat Slips Dredge Pond Work	
Cove		\$ 31,000
	Carpet Replacement Walk-in Freezer	
Golf Course		\$ 56,500
	Slopes Mower Top Dresser	
Pro Shop		\$ 16,500
	Outdoor Walk-in Refrigerator	
Pool		\$ 12,500
	Table Replacements & Umbrellas	
Security		\$ 44,500
	UTV Star Com Radio Systems (County Upgrade)	
Maintenance		\$ 50,000
	Paths to Boat Docks Aerial Lift	
Vehicles		\$ 15,000
	Rental Boat	
Property		\$ 298,000
	Campground Chip & Seal + Main Entrance to Clubhouse Fitness Equipment Lake Road 3 Entrance Landscaping Tennis Courts	
		\$ 679,000

Memorandum



To: Board of Directors

Date: October 5, 2021

From: Budget Commission

Memo: 2021-89

Topic: adoption of the 2022 Operating and Building Fee Schedules

Issue: Per CICAA, the budget must be advertised for a minimum of 30 days prior to the Board adopting the budget. The 2022 Operating and Building Fee Schedules were published in the September issue of *The Apple Core*. The Board is now able to adopt the 2022 Operating and Building Fee Schedules.

Recommendation: To adopt the 2022 Operating Fee Schedule and the 2022 Building Fee Schedule as published in the September issue of *The Apple Core*.

Plan on a Page: High Performing Operations and Management -To operate at full efficiency and effectiveness for the benefit of the Association.

2022 Operating Fee Schedule - approved for publication 8/21/21

ANNUAL FEE		DAILY RATE	
Annual Assessment (Due March 1)	\$ 1,100.00	Golf	Mon-Fri
Annual Trash Fee* (Due March 1)	\$ 120	Property Owner	Wknd/Hol
*required for all ACL homes, fee includes two passes (paper or decal)		Holes (9)	9
		Holes (18)	12
Seasonal Amenity Licenses (Due March 1)		Non Property Owner	
Marina Boat Slip	\$ 200	Holes (9)	12
Nixon Boat Slip	\$ 200	Holes (18)	16
Zone Boat Slip	\$ 200		23
Seasonal Campsite (\$700)/Trash (\$80)/Camper (\$5)	\$ 785	Cart Rental	
Camper Winter Storage (Onsite)	\$ 135	Holes (9)	7
Golf Cart/ATV/UTV Storage Inside	\$ 125	Holes (18)	13
Golf Cart Storage Outside	\$ 25	Call ACL Pro Shop for tee times (815) 492-2477	
Kayak Locker Rental	\$ 25		
Registration Fees		Campground	Mon - Thurs
Owner Amenity Registration Fee (per owner)	\$ 100	RV Site (power and water)	Wknd/Hol
Golf Cart Registration	\$ 5	Property Owner	\$ 14
Motorized 1st Boat	\$ 30	Guest	\$ 28
Motorized 2nd Boat	\$ 5	Tent Site (primitive)	
Non-Motorized Boat	\$ 5	Property Owner	\$ 9
Snowmobile	\$ 5	Guest	\$ 19
ATV/UTV	\$ 30	Extended Camping Fees Primitive/Full Hook Up per week	
Annual Golf Season Passes		PO 60	PO \$ 85
Property Owner (Individual)	\$ 225	Guest 125	Guest \$ 170
Junior (Age 10-16)	\$ 25	Washer/Dryer	\$ 1.25 (per load)
Non Property Owner (Individual)	\$ 350	Call ACL Office for reservations (815) 492-2238	
Corporate	\$ 2,000	Marina Boat Slip Rentals	
Classes		Daily	\$25
Swimming Lessons (per person, two sessions)	\$ 35	Weekly	\$105
Swimming Lessons (per person, one session)	\$ 18	Monthly	\$200
Private Swimming Lesson (per person, per lesson)	\$ 25	Call ACL Office for reservations (815) 492-2238	
Miscellaneous		Boat Rentals	
Auto Decals (5 free per OARF paid)	Each \$ 5	Pontoon 1/2 Day	Mon-Thurs Property Owner 100
Amenity Tag (10 free per OARF paid)	\$ -	Pontoon Per Day	Mon-Thurs Guest 175
One Additional One (1) Day Amenity Tag	\$ 3		Wknd/Hol Property Owner & Guest
One Additional Three (3) Day Amenity Tag	\$ 5	Pontoon 1/2 Day	\$230
One Additional Annual Amenity Tag	\$ 15	Pontoon Per Day	\$325
Replacement Trash Pass	\$ 30	Call ACL Office for reservations (815) 492-2238	
Directory	\$ 5	Clubhouse Rental	
Electronic Item Disposal	\$ 30	Business Meetings	Number PO Fee
Large Item Disposal	\$ 15	Mon - Thurs	1-100 \$ 100
Mattress Disposal	\$ 30		101-250 \$ 200
Map	\$ 5	Parties/Open Houses	
Delinquent Dues Fee (Assessed March, April, May)	\$ 125	Sun-Thurs	1-75 \$ 100
Payment Plan Processing Fee	\$ 35		76-150 \$ 200
Payment Plan Late Sign Up Fee	\$ 25		151-250 \$ 400
Lot Mowing	\$ 80	Fri-Sat	27395 \$ 125
Pool Party	\$ 125		76-150 \$ 275
Monday - Thursday	\$ 150		151-250 \$ 450
Friday - Sunday	\$ 150	Weddings/Receptions	
*Excess of 50 people (add)	\$ 50	Fri-Sat	1-250 \$ 450
Programs		ACL Club Fee: Non-ACL events, etc.	\$ 25
Heat Light Program Call SSD Office (815) 492-2436		ACL Employee (restrictions apply)	\$ 25
Sub-License Boat Slip Program Call ACL Office (815) 492-2238		Deposit of equal amount required. For guests, add \$100 to above rate. For reservations call (815) 492-2769	

ALL MANDATORY FEES MUST BE PAID ON ALL LOTS OWNED PRIOR TO ANY REGISTRATIONS OR DISTRIBUTION OF PASSES, AMENITY TAGS, OR STICKERS, UNLESS PROPERTY OWNER IS ON THE ACLPOA PAYMENT PLAN.

ACLPOA 2022 Construction Fee Schedule - approved for publication 8/21/21

New Dwelling: Permit Fee/Inspection (Good for one (1) year)	\$1,000
Environmental Impact Fee (Non-Refundable): New dwelling only	\$1,000
Environmental/Debris Bond (Refundable)	\$500
Additions to Existing Dwelling: Permit fee	\$0.20/square foot
All Accessory Structures	\$0.20/square foot
General Permits: Per item	\$10
Driveways	
Shoreline Construction	
Demolitions	
Landscaping: Any earthwork or lot grading whether performed as a single project or as a series projects on an existing developed lot	
Roofing	
Boat Docks	
Small Misc Permits/Projects	
GIS: Full Site	\$325

Building code regulations may be obtained from the Building & Environmental Code Book or on the website www.applecanyonlake.org



Memorandum

To: Board of Directors

Date: October 4, 2021

From: Shaun Nordlie

Memo: 2021-86

Topic: Multi-Sport Complex Ad Hoc Commission

Issue & Analysis: The 2022 R&R budget includes \$245,000 for a replacement of the Multi-Sport Complex. With a purchase this large and because of the many options for replacing the Multi-Sport Complex, an ad hoc commission will be used to help the Building and Grounds Manager in researching and finding the best solution for our new Multi-Sport Complex. The charge of the ad hoc commission will be as follows –

To work with the Building and Grounds Manager to research options for replacing the Multi-Sport Complex and to make a recommendation to the Board of Directors to award the project to the best contractor based on the findings of the Building and Grounds Manager and the ad hoc commission.

Recommendation: To create the Multi-Sport Complex Ad Hoc Commission with the charge of working with the Building and Grounds Manager to research options for replacing the Multi-Sport Complex and to make a recommendation to the Board of Directors to award the project to the best contractor based on the findings of the Building and Grounds Manager and the ad hoc commission.



Memorandum

To: Board of Directors

Date: October 4, 2021

From: Shaun Nordlie

Memo: 2021-84

Topic: Golf Cart Lease

Issue & Analysis: The current golf cart lease with Harris Golf Carts expires on December 1, 2021. Bids were sent for a new lease starting with the 2022 golf season from three vendors. ACL rents 25 golf cars per year and is given a utility/beverage cart with the lease. Harris Golf Cars, John's Onsite and Premier Golf Carts were asked to submit proposals for a new lease for used golf carts no older than 2018 during the term of the lease. We received proposals from Harris and Premier. The Harris Proposal offers 2019 golf carts while the Premier proposal offers new carts because they don't have used golf carts to lease now. My recommendation is to continue our lease with Harris Golf Carts, we have been happy with their service and the golf carts they have provided for the past five years.

Recommendation: To accept the golf cart lease contract from Harris Golf Cars for 25 golf cars plus a utility/beverage golf car from 04/01/22 through 12/01/27.



Iowa Location:
155 N. Crescent Ridge • Dubuque, IA 52003

Illinois Location:
549 Heartland Drive, Suite A • Sugar Grove, IL 60554

Wisconsin Location:
13900 Leetsbir Road • Sturtevant, WI 53177

Expressly Prepared for:

***Apple Canyon
Lake***
Apple River, IL



Presented By:

Scott Harris
President



9/10/21



THE DRIVE



Iowa Location:
155 N. Crescent Ridge • Dubuque, IA 52003

Illinois Location:
549 Heartland Drive, Suite A • Sugar Grove, IL 60554

Wisconsin Location:
13900 Leetsbir Road • Sturtevant, WI 53177

HARRIS GOLF CARS ON-CALL SERVICE CONTRACT

This service agreement shall be between the Customer, **Apple Canyon Lake**, and the Provider, **Harris Golf Cars**.

HARRIS GOLF CARS SERVICES PROVIDE

All recommended preventive maintenance as described by Yamaha.
 All warranty repairs, modification campaigns, including parts and labor.
 On-Call service visits including labor to inspect and repair vehicles to ensure safety and Customer Satisfaction.
 Annual Service: Parts & Labor Cost for Complete inspection and repair of components including but not limited to: steering, suspension, brakes, acceleration, electrical, drive train, clutches, batteries, tires, etc. All cars will be returned to manufacturers specs for safety and reliability.

CUSTOMER RESPONSIBILITIES

During the term of this agreement, Customer shall complete the following services at Customers expense:
 Perform daily pre-operation inspection.
 Maintain all fluid levels and provide clean fuel and or proper battery charge, improper maintenance could void warranty
 Clean and Secure cars
 Damage repairs from accident, abuse, negligence or acts of God. Harris will provide repairs on a time and material basis.

DEFINITIONS

Preventive Maintenance: All preventive maintenance as written in the Genuine Yamaha Periodic Maintenance Chart (found in owner's manual) including labor. This contract requires the use of Genuine Harris/Yamaha Parts only.

Warranty: Any repairs made due to a manufacturer's defect during Yamaha's limited four-year warranty period. This includes all factory modification campaigns.

On-Call Service: or periodic visits to inspect the vehicles to ensure safety and Customer Satisfaction. To perform maintenance, warranty repairs and or normal wear and tear repairs as requested or recommended.

Normal wear: A part that wears out or fails due to normal wear and tear, including tire/wheels. This does not include repairs caused by damage, abuse, or acts of God. Harris Golf Cars will perform these repairs at Customers expense.

ADDENDUM

Cars covered by this contract; Drive 2 AFI Quantity 25, Beverage, QTY 1. This agreement shall be for the period of 04/01/22 through 12/01/27. Customer reserves the right to cancel this contract at any time by providing Harris Golf Cars with written notice at least 60 days in advance. Harris Golf Cars has the right to cancel this contract if Customer fails to execute the Customer Responsibilities described above.

PAYMENT SCHEDULE

This agreement is provided as a complimentary service and is an integral part of the lease/purchase contract.

CUSTOMER SIGNATURE	CUSTOMER TITLE	DATE
DISTRIBUTOR SIGNATURE	DISTRIBUTOR TITLE	DATE



Serving Iowa, Illinois, Nebraska & Wisconsin

Iowa Location:
155 N. Crescent Ridge • Dubuque, IA 52003

Illinois Location:
549 Heartland Drive, Suite A • Sugar Grove, IL 60554

Wisconsin Location:
13900 Leetsbir Road • Sturtevant, WI 53177

EQUIPMENT, PRICING & TERMS

EQUIPMENT:

Twenty five (25) 2019 Yamaha Drive 2 Glacier White Golf Cars:

- ~ Electronic Fuel Injection 357cc Yamaha engine
- ~ ClimaGuard Sun-Top w/ Gutter System
- ~ Information Holders
- ~ Number Decals
- ~ Delivery & Set-Up

One (1) Reconditioned Yamaha Beverage Unit

68-MONTH LEASE:

► **CARB FLEET**

- a. \$110.00 per car per month
- b. Monthly Payment of \$2,750.00.
- c. 6 Payments Yearly May - October
- d. Total annual cost \$16,500.00. Lease term total = \$82,500.00

TERMS:

- a. Fleet delivery proposed for Spring 2022 with First payment on new lease to be May 1, 2022.
- b. Lease includes Harris/Yamaha Golf Car On Call service & year end maintenance contract. Apple Canyon Lake is responsible for the storage of the golf cars during the lease term.
- c. Any applicable sales tax included in quote.
- d. Yamaha Beverage Unit is complimentary during life of lease

Accepted By: _____
Apple Canyon Lake ~ Signature Apple Canyon Lake ~ Print

Date: _____

Accepted By: _____
Scott Harris ~ Signature Scott Harris ~ Print

Date: _____

PREMIER | GOLF & UTILITY VEHICLES, INC.

Club Car Authorized Distributor

Date Of Quote: September 10, 2021
 Sales Person: Ben Rudolph
 608-712-2945 (Cell)
Ben@Premiergu.com

To: Apple Canyon Lake Golf Course
 14A200 E. Apple Canyon Road
 Apple River, IL 61001
 Attn: Jessica Williams

WE ARE PLEASED TO SUBMIT THE FOLLOWING QUOTATION:

QUANTITY	DESCRIPTION	UNIT PRICE	EXTENSION PRICE
25	New 2022 Club Car Tempo EFI Gas Golf Cars equipped as follows:	See Rate Page	See Rate Page
	Kohler ECH440 14HP Over Head Valve (OHV) Engine	Incl.	Incl.
	Electronic Fuel Injection (EFI) Gas Engine uses 35% less fuel	Incl.	Incl.
	Molded In Scuffguards	Incl.	Incl.
	Sweater Basket	Incl.	Incl.
	Car Color: Beige, Cashmere, Green, Platinum, Sapphire, White	<i>Circle Desired</i>	Incl.
	Seat Color: Beige, Black, Gray, White	<i>Circle Desired</i>	Incl.
	Monsoon Canopy Top Color: Beige, Black, White	<i>Circle Desired</i>	Incl.
	Number Decals - 2 Per Car (choose locations)	Incl.	Incl.
	Molded In Bagwell	Incl.	Incl.
	Information Holder	Incl.	Incl.
	Full Factory Warranty	Incl.	Incl.
	Custom Setup & Delivery	Incl.	Incl.
	Annual Maintenance Service Agreement	Incl.	Incl.
	Tournament Fleet Rentals at \$40/Car/day	Incl.	Incl.
1	New 2022 Club Car Carryall 500 Utility Vehicle w/ PRC	Incl.	Incl.
	Kohler ECH440 14HP Over Head Valve (OHV) Engine	Incl.	Incl.
	Car Color: Bright Blue, Dark Gray, Dark Green or White	<i>Circle Desired</i>	Incl.
	Canopy Top: Beige, Black or White	<i>Circle Desired</i>	Incl.
	Gray Bench Seat	Incl.	Incl.
	Extra Traction 6 ply Turf Tires 18x8.5-8	Incl.	Incl.
	Halogen Headlights	Incl.	Incl.
	Aluminum Utility Box w/ Tailgate, Manual Dump -800 lb. Cap.	Incl.	Incl.
	Hinged Windshield	Incl.	Incl.
TERMS	F.O.B.	APPROX. DELIVERY DATE	QUOTE VALID
Straight Lease	Apple River, IL	June, 2022	For 15 Days

Accepted By: _____

Date: _____

Title: _____

Premier Golf & Utility Vehicles, Inc.

By: _____

Thank you for your interest in Club Car

Ben Rudolph



PREMIER | GOLF & UTILITY VEHICLES, INC.

Club-Car Authorized Distributor

Date Of Quote: September 10, 2021
 Sales Person: Ben Rudolph
 608-712-2945 (Cell)
Ben@Premiergu.com

To: Apple Canyon Lake Golf Course
 14A200 E. Apple Canyon Road
 Apple River, IL 61001
 Attn: Jessica Williams

WE ARE PLEASED TO SUBMIT THE FOLLOWING QUOTATION:

QUANTITY	DESCRIPTION	UNIT PRICE	EXTENSION PRICE
	Apple Canyon Lake Golf Course		
	25 - New 2022 Club Car Tempo EFI Gas Golf Cars equipped as on the proposal page:		
		Monthly Payment/Car	Total Monthly Payment
Term	Straight Lease (No Ownership):		
	<i>Circle one of the choices if Desired</i>		
5 Years	30 Monthly Payments May-October from 2022-2026 <i>Total Annual Payment</i>	\$ 133.13 \$ 798.78	\$ 3,328.02 \$ 19,968.12
6 Years	36 Monthly Payments May-October from 2022-2027 <i>Total Annual Payment</i>	\$ 123.35 \$ 740.10	\$ 3,083.56 \$ 18,501.36
	Details:		
	* John's Onsite Service to provide rental cars at a rate of \$40/Car/Day		
	*Above rate includes 2022 Carryall 500 Utility with PRC Insert		
	*Customer is responsible for any taxes, insuring and maintaining the vehicles during the lease.		
	*Annual Maintenance included with lease. End of season Oil Change, Air Filter, Spark Plug and all recommended PM work.		
	*First Payment due June 1st, 2022		
	*Payments due June-November in 2022		
	*No Payments November(except 2022)-April		
	*Service, Parts, Warranty & T-Fleet handled by John's Onsite Service		
	*All Vehicles will come back to Premier Golf & Utility Vehicles at the end of the lease.		
TERMS Straight Lease	F.O.B. Apple River, IL	APPROX. DELIVERY DATE June, 2022	QUOTE VALID For 15 Days

Accepted By: _____

Date: _____

Premier Golf & Utility Vehicles, Inc.

Title: _____

By: _____

Thank you for your interest in Club Car

Ben Rudolph





Memorandum

To: Board of Directors

Date: October 7, 2021

From: Tim Brokl

Memo: 2021-91

Topic: 2022 Calendar

Issue: The Communications & Recreation Department will produce a 2022 glossy calendar to include the tentative dates of most ACL events and special holiday office closings, as well as regularly scheduled Board and some committee/commission meetings. It is essential that the Board takes note of the proposed ACL calendar of events, meetings and official Association closings. Office hours and Solid/Waste Recycling hours will be printed on each month's page but are not included on each date in the interest of space. Approval is appreciated so that staff may submit the final information to the printer in November. The 2022 calendar and Chronicle (community book) will be mailed to each owner in December. Please know that some dates may change throughout the year as needed, some events may be added, and some may be cancelled.

Recommendation: To review and accept the 2022 calendar of events & special hours for publishing.

Plan on a Page: Growth and Value Enhancement of Association – To promote membership and property of the Association.

2022 Calendar of Events

Updated 10/05/2021

January 1 Association Office Closed – New Year’s Day
January 1 Solid Waste & Recycling Closed
January 3 Association Office Closed – New Year’s Day observed
January 15 Sledding Party 1-3pm
January 15 Family Potluck & Movie Night 5-8:30pm
January 20 Board candidate applications due
January 25 Single installment ACH sign-up deadline
January 31 Payment Plan sign-up deadline
February 1 Single installment ACH payments withdrawn
February 5 Midwinter Gathering 1-7pm
February 19 Pinewood Derby 12:30pm
February 20 Special Office Hours 8am – 3pm
February 25 Payment Plan late sign-up deadline
February 27 Special Office Hours 8am – 3pm
March 1 Assessments & Fees due
March 1 Boat Slip and Campsite Licenses due
March 1 First Payment Plan installment withdrawn
March 2 \$125 Delinquent Dues Fee assessed on unpaid assessments
March 15 Unpaid/Incomplete Seasonal Boat Slips & Campsites forfeit
March 26 Campsite Swap & Assignment Day @ 10am
March 26 Slip Swap @ 1pm
April 1 Campground & Golf Course Open, Weather Permitting
April 1 \$125 Delinquent Dues Fee assessed on unpaid assessments
April 1 Interest assessed on unpaid assessments
April 2 Campground & Golf Course open, weather permitting
April 2 Slip Assignment Day & Sub-License Slip Assignments @ 10
April 9 Meet the Candidates 1pm
April 10 Easter Egg Hunt 10:30am – (Sunday before Easter)
April 23 Marina Opens
April 23 Spring Clean-up 1pm
April 24 Buddy Bass Tournament 7am – 3pm
April 29 Garden Club Spring Luncheon 11:30am
May 1 \$125 Delinquent Dues Fee assessed on unpaid assessments
May 1 Liens filed on unpaid assessments
May 15 Buddy Bass Tournament 6:30am-2:30pm
May 22 Summer office hours begin; Monday through Saturday 8 am to 3 pm, Sunday 8 am to Noon
May 27 Special Holiday Hours – 8am to 3pm
May 28 BBQ Cook-off TBA
May 29 Campground Commission Pancake Breakfast 8am-12pm
May 29 Garden Club Annual Plant Sale 8am-12pm
May 30 Holiday Office Hours 8am – Noon
May 30 Solid Waste & Recycling 10am – 7pm
June 4 ACL Garage Sales 8am-2pm
June 10 Mailed Ballots for BOD Election Due
June 11 Annual Meeting, Ballots Cast by 1pm

June 15 Payment Plan installment withdrawn (5-payment)
June 25 Try Scuba TBD
June 25 Farm Fun Days 10am-1pm
June 26 Buddy Bass Tournament 6am-2pm
July 1 Special Holiday Hours – 8am to 3pm
July 2 Golf Cart Parade 10:30am Check-in
July 2 Rumble & Roll Ball Race 11am
July 2 Fireworks at Dusk
July 4 Holiday Office Hours 8am – Noon
July 4 Solid Waste & Recycling 10am-7pm
July 6 Canyon Kids Camp 1-3pm
July 7 Canyon Kids Camp 1-3pm
July 8 Canyon Kids Camp 1-3pm
July 9 Open-Air Concert 7-10:30pm
July 14 World’s Largest Swim Lesson TBA
July 15 Payment Plan installment withdrawn
July 16 Big Cup Tournament TBA
July 17 Buddy Bass Tournament 6am-2pm
July 23 Kids Fishing Tournament TBD
July 30 TT5k for a Cause 7:30am
July 30 Beer Tasting 12-3pm
July 30 Sizzling Summer Concert 7pm
July 31 Deer Management Program application deadline
August 6 Youth Archery Day 9am-12pm
August 6 Venetian Night 8:30pm
August 13 Club Championship TBA
August 14 Deer Management Qualifications 9-11am
August 15 Payment Plan installment withdrawn (5-payment)
August 20 Night Golf 8pm
August 21 Buddy Bass Tournament 6:30am-2:30pm
August 23 Deer Management Qualifications 9-11am, Zone Selection 1pm
September 4 Ice Cream Social & Craft Fair 10am-4pm
September 5 Association Office Closed – Labor Day
September 5 Solid Waste & Recycling 10am – 7pm
September 6 Regular office hours resume; Monday through Saturday 8 am to 3 pm, closed Sunday
September 10 Foundation Poker Run 2pm
September 17 Volunteer Appreciation Dinner 6pm
September 18 Buddy Bass Tournament 7am – 3pm
September 24 Buddy Bass Tournament Classic 7:30am – 3:30pm
September 24 Farm to Table Dinner 6pm
September 25 Buddy Bass Tournament Classic 7:30am – 3:30pm
October 1 Relay for Life Fall Feast TBD
October 7 Garden Club Fall Luncheon 11:30am
October 15 Fall Clean-up
October 8 Halloween at the Campground 6pm
October 22 Haunted Trail 6:30-9:30pm
October 30 Campground, Marina, Golf Course Close for the Season

November 1 Election Day
November 11 Association Office Closed – Veterans Day
November 13 Informational Gathering 1pm
November 24 Association Office Closed – Thanksgiving
November 24 Solid Waste & Recycling Closed
November 25 Association Office Closed
November 26 Association Office Closed
December 1 Senior Exemption application deadline
December 3 Cocoa & Cookies with Santa 5-6:30pm
December 3 Tree Lighting Ceremony 6:30pm
December 6 Jingle Bell Brunch 10am
December 23 Association Office Closed – Christmas Eve observed
December 24 Association Office Closed – Christmas Eve
December 25 Association Office Closed – Christmas Day
December 25 Solid Waste & Recycling Closed
December 26 Association Office Closed – Christmas Day observed
December 30 Association Office Closed – New Year’s Eve observed
December 31 Association Office Closed – New Year’s Eve
January 1, 2023 Association Office Closed – New Year’s Day
January 2, 2023 Association Office Closed – New Year’s Day observed

12.7

Discussion on
Board Policy

12.8 Capital Projects Update

Workshop

Zebra Mussels

Zebra Mussels

By Joe Rush, Lake Consultant

Many times in the past we've put out articles about invasive species to educate our members about them in hopes of curtailing the spread of non-native, invasive species into Apple Canyon Lake. This article, however, is being written to educate the community about a new aquatic critter that has been taking up residency within our lake for the past few years. It's known as the zebra mussel. Many of you have witnessed these mussels attached to boat lifts, docks, and lower units on your boats. In this article, you'll learn a brief history of the zebra mussel, and why it is a concern for us to have them here.

North American Invaders: In 1988, the first zebra mussels were discovered in Canadian Waters of Lake St. Clair (a body of water that connects Lake Huron and Lake Erie). Within 2 years, zebra mussels had been found in all of the Great Lakes! By 1994, there were reports of zebra mussels within 21 Midwest and Eastern states. Their spread was attributed to invasion into 8 different significant river drainage systems, including the Mississippi and Illinois rivers. Since then, they have been found in rivers, lakes and reservoirs from California to North and South Dakota, to Texas, and all the way to the Eastern seaboard.

This mussel hails from the Black, Caspian and Azov Seas of Europe. It is deduced that the most likely cause of introduction into North American waters was due to the ballast exchange of a single commercial cargo ship traveling from the Black Sea to the Great Lakes. From the Great Lakes, spread of the larval (baby) zebra mussels was due to drifting on currents in lake and rivers as well as individuals trailering their boats from infested waters into non-infested waters. Agricultural inspection stations discovered at least nineteen trailered boats crossing into California had zebra mussels attached to their hulls or motors; under cool and humid conditions, the mussels are capable of living for several days out of water!

Life History: Zebra mussels generally reproduce during their second year and over 1,000,000 eggs can be distributed by a single mussel in a spawning season. Eggs are released into the water column and the larvae (veligers) hatch in about 3 to 5 days. These veliger 'babies' are free-swimming, drifting around with the water currents, for up to a month after hatching. Once they reach a suitable place, they attach to a hard surface and begin to filter water and grow.

Zebra mussels filter water and feed primarily on phytoplankton (the start of the lake's food web) in the water column. One fingernail-sized mussel is capable of filtering about one liter of water PER DAY! (One liter is equivalent to just over ¼ of a gallon). This may not seem like a lot to you, but when you take into account that there can be more than 1,500 mussels in a 3 square foot area, there is A LOT of water filtered! An infestation of large numbers of zebra mussels can have serious implications to the ecology of a lake system.

Impacts of Zebra Mussel Introductions: Beyond causing problems with docks, boat lifts and boat intakes, zebra mussels can have a profound impact on the lake's they invade. They primarily feed on phytoplankton (green algae that is good for the lake and is the beginning of the food web), but they also filter out other materials that are suspended in the water column, including bacteria, protozoans, and small microorganisms important in the food web. Large populations of zebra mussels have been known to reduce this important phytoplankton significantly following invasion. They are also known to reject the blue-green algae therefore causing a shift in the algae community in favor of blue-green algae, in particular microcystis (the culprit that produced microcystin toxins).

The zooplankton (tiny microorganisms that are a major food sources to the fisheries) can also be impacted by zebra mussel invasions. For example, some studies have shown a 55%-71% drop in zooplankton abundance in Lake Erie after the introduction of zebra mussels. There may be negative effects on the fish population due to the reduced food available to fish because of zebra mussels filtering out and feeding on zooplankton. Most impacted would be the larval fish population due to the direct competition for the zooplankton food source. Experiments show evidence that larval fish growth can be reduced but science is yet to observe negative impacts on natural populations of fish.

Along with these other potentially negative impacts by these filter-feeding mussels, the filtering of water increases the water's clarity, causing an increase in aquatic weed growth stimulating a potentially un-balanced shift to excessive rooted plants.

Management and Control: While there are some things that can kill zebra mussels, there isn't a 'cure all' for these invaders. For example, other Associations have stocked \$5,000 per year of mussel-eating fish (red eared sunfish or pumpkinseed sunfish) for 3 to 4 years to try and reduce the spread of zebra mussels in the lake. Even though these stockings have occurred, they have still witnessed a substantial increase in zebra mussels.

They also conduct annual drawdowns, which can dry out or freeze out many of the shoreline invaders. While this isn't completely affective on the mussels attached at deeper depths, it does reduce some of the biomass in shallow water areas.

There are also chemical treatment methods for treating closed systems such as water treatment plants and power cooling plants. For example, there is a product on the market, approved for closed system use and open water lake use. It's known as "Zequanox", and it uses a naturally occurring bacteria in soils and other environments. During inquiries into the pricing, we discovered that the product will cost upwards of \$10,000 PER ACRE of treatment. This translates into \$2.2 MILLION to treat HALF of our lake. This may become an option in the future should costs reduce, but this would not eradicate the mussel, but rather suppress some of its growth.

Science is currently working on a program to interrupt the breeding time of the zebra mussel so that veliger larvae aren't conceived and therefore can't hatch. If this occurs, the adult zebra mussels would die after about 3-4 years without reproducing. However, this is

yet to be marketed as a viable option. We are hopeful this will happen in the near future, and be affordable.

In closing, let us use the zebra mussel as an example of why we need to be sure we, as lake users, are aware of what we may be bringing into our lake. Zebra mussels are not the only invader that can come into Apple Canyon Lake. If you choose to use your boats elsewhere other than at Apple Canyon Lake, please be sure to wash your boats and equipment before bringing them back into Apple Canyon Lake. This includes cleaning ballasts in wake or ski boats, motor intakes in all boats, and live wells in fishing boats. Bait buckets are also a concern. NEVER dump bait buckets into Apple Canyon Lake. Remember, it's suspected that ONE ship brought this invasive mussel to North America from the Black Sea... And it only takes one boat on the Mississippi for an afternoon to bring any of many aquatic hitchhikers back to our beautiful lake. Help us stop the spread of aquatic invaders!

Credit: Facts for this article courtesy of the United States Geological Survey – Nonindigenous Aquatic Species website and zebra mussel fact sheet:
<http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=5>



Protect your boat and engine from zebra mussels



Is your boat protected against zebra mussels? Do you know what to do? Unfortunately, some boat owners are seeing and feeling the damage caused by zebra mussels first hand. Their boat hulls are being damaged and their motors are overheating because they do not know how to minimize the impacts zebra mussels can cause. These small invasive mussels attach to hard surfaces including boats and motors! There are simple and proactive steps owners may implement to protect their investment and prevent the spread of invasive species into more of Wisconsin's waters.

Proper boat hull, engine maintenance and cleaning are key to saving thousands of dollars in repair costs resulting from damage caused by zebra mussels. Juvenile and adult zebra mussels have the ability to attach to many different types of substrate including fiberglass, aluminum, wood, and steel. This ability to attach decreases fuel efficiency and damages the boat's finish. Their larvae (called veligers) are extremely small – too small to see without a microscope. When veligers are present in the water they can be drawn into engine passages or can move into them on their own. Once they settle out in the engine cooling system, they can grow into adults and may block intake screens, internal passages, hoses, seacocks, and strainers. The best ways in which boat owners may avoid this type of damage are:



Zebra mussel veliger

Use a boatlift to completely remove the watercraft from the water. Boatlifts prevent the attachment of zebra mussels by lifting the boat out of the water when it is not being used. This helps reduce the need to scrape mussels off of the boat at the end of the season and allows the boat to be inspected, washed, or completely dried between uses.

Use your boat. If boats are left moored in zebra mussel infested waters run the engine at least twice a week at slow speeds (about 4-½ mph) for 10 to 15 minutes. The hot water will kill the zebra mussels in your engine's cooling systems. Keep an eye on your engine temperatures – if you notice an increase, it may



mean that zebra mussels are clogging your cooling system. Immediately inspect the system inside and out, and remove any zebra mussels disposing of them in the trash.



Lift the motor out of the water between uses if mooring. By lifting the motor out of the water you will reduce the chances of zebra mussels colonizing the intake grate. Fully discharge any water that may still remain in the lower portion of the cooling system as this water may contain veligers.

Photo by Steve Krynock

Tip down the motor and discharge the water when leaving a waterbody. This will reduce the chances of zebra mussels being carried to a new location in the trapped water. Don't forget to remove all aquatic plants and animals from the boat, motor, trailer, and equipment. Aquatic plants and animals will often have zebra mussel veligers or juvenile mussels attached that will hitch a ride to a new location. Also remember that the plant itself could be an invasive species such as Eurasian Water Milfoil.

Motor "muffs", also known as motor flushers, are another tool designed to remove zebra mussels and other materials from your boat engine or personal watercraft. Motor "muffs" flush away soil particles and other foreign materials,



preventing clogging, corrosion and helping to extend the life of your engine. They are important for boat



maintenance and are simple to use. Clamp the motor flusher onto the lower unit over the cooling inlets on either side of the motor, and screw the nozzle of your garden hose into it. This allows you to run the motor on land without worrying about heat buildup. Run the boat engine for approximately 10

minutes or as suggested by the manufacturer (Remember to turn the water on before running the engine!).

Foreign materials, including zebra mussels, will be "flushed" out of the engine. To prevent veligers from reentering the engine when the boat is placed back in the water and docked, tip the engine up, keeping it out of the water when not in use. Motor flushers may be purchased for around \$4.00 at area marinas, boat retail outlets, hardware stores and local sporting goods stores. They may also be purchased online.



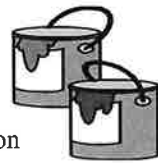
Rinse boat and equipment. Adult zebra mussels should be removed from your boat, trailer, and equipment by hand (whenever possible) and discarded in the trash before rinsing the boat. Boats and equipment may be pressure washed to remove veligers and juvenile zebra mussels. Biologists who have studied zebra mussels recommend using high-pressure hot water to remove and kill zebra mussels that are attached to your boat hull (use water >104 degrees F if possible). It is okay to use high-pressure cold water if hot water is not available. Avoid pressure washing classic and wooden boats that are not made of metal. For these boats, manually remove plant and animal materials, drain all water, and dry in the sun for 5 days.

Apply antifouling paints to the hull and the engine's cooling system. In-line strainers can also be installed

in the engines cooling system. Anti-fouling paints are routinely applied to boat hulls to

prevent zebra mussel attachment, algae growth and other marine organisms from

attaching to the hulls of watercraft. An evaluation of hull paints by Ohio Sea Grant Extension



in 1990 demonstrated that commercially available antifouling coatings could provide season long

protection from zebra mussels in the Great Lakes region. Periodic inspections should be done throughout

the year to check for and repair cracks or chips in the paint. Reapplication of the anti-fouling paint should

be done according to the manufactures' recommendations every couple of years to provide the maximum

level of protection possible. Alternatively, protective coatings that contain an epoxy or silicon type material

are effective in preventing zebra mussel attachment, and have the added benefit of deterring plants and

algae from attaching to the boat hull. Anti-fouling paints that are copper based are okay to use in

Wisconsin. It is best to purchase anti-fouling paints or protective coatings from an area boat dealer or your

local marina. Please follow all labeled directions when applying these materials to protect our surface

waters.

Adult zebra mussels can be carried to new water bodies when attached to boats and plant fragments.

Veligers can be transported in water.



Please take the following steps to prevent the transport of zebra mussels and other aquatic invasive species to new waters:

- ❖ **Inspect** and **remove** aquatic plants, animals, and mud from your boat, trailer, and equipment.
- ❖ **Drain** all water from your motor, livewell, bilge, transom, etc.
- ❖ **Dispose** of unused bait in the trash.
- ❖ **Wash** your boat and equipment with hot and/or high pressure water, particularly if moored for more than one day, OR
- ❖ **Dry** your boat and equipment thoroughly (in the sun) for five days.

Written by: Amy Bellows, Wisconsin Department of Natural Resources

Special thanks to Doug Jensen MN Sea Grant and Chuck O'Neill NY Sea Grant for reviewing and providing technical information for this article

