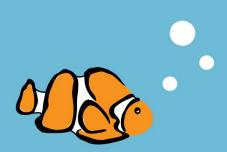
MANUAL

Aquarist's Notes





Aquarist's Notes

macOS version

© Luděk Šlouf

Introducing the simple application for your Aquarium. With this handy app you will have all the information about your aquariums right on your device.

Aquarist's Notes allows you to keep track of any number of aquariums. You'll be able to keep track of all the living creatures in your aquariums, including their species, Numbers and other important information.

Luděk Šlouf aquariumnote.lvslo.eu

DISCLAIMER

This software has been created with the utmost care. Nevertheless, errors cannot be completely excluded. Also, correct functioning due to different operating system installations and possible operating system emulations cannot be guaranteed.

Use of the program is at your own risk. Any liability in connection with the application is disclaimed.

This applies in particular to possible loss of data and measured values of aquariums as well as possible damage to aquariums and animals when using the calculations in the application.

The application performs chemical calculations and allows important aquarium parameters to be recorded. Any intervention in the aquarium is your responsibility and the manufacturer of the app is not responsible for any damage to animals or aquariums.

The calculations provided by the app should only be considered as guidelines or dosage suggestions. The ultimate responsibility for dosing rests with you or the respective manufacturer of these products. It is always necessary to regularly check the effectiveness and safety of the dosage of chemicals and salts in your tank.



The app can be run on iPhone, iPad and MacBook. Installation can be done from the AppStore.

Dashboard				at of aquariums or drag
				board.
uto Life				
Maintenance				
Inventory	Welcome to t	he Aquarist's Note	es app	
II Measurement	Introducing the si	mple mobile app for your Aqua	irium.	
Consumables		u will have all the information ims right on your device.	about your	
🗎 All Attachm	light	ing right on your device.		
Volume Cal		tart using the app		
 Salinity Ca 				
Effect of				
🦟 kH Calcula	Show at each start	Terms of use	Privacy policy	

This documentation applies to the macOS version.

The first time you launch the app, you will see a splash screen. In the next step, you can

Units Type:	Metr	ic		Im	perial
Density Units:	PSU	SG	D	(Kg/l)	EC mS/c
Alcalinity Units:	dKH		mEq/l		ppm/l
Energy Price:	0,00 CZK				

set the basic preferences needed for the app to work.

If you are already using iOS version of app, you can skip the settings and wait for the data to sync from iCloud.

Select the measured elements set							
Select Set of meas	ured Elements	Reef Aquarium Basic		0			
Symbol	Order	^ Name	Enabled				
Т	0	Temperature					
Sal.	1	Salinity					
kH	2	Alcalinity					
Po4	3	Phosphate					
NO3	4	Nitrate					
			Cor	ntinue			

You can now create your first aquarium using either the File > New Aquarium main menu or the + button in the left column next to the Aquarium heading.

Hall			(J				
Dashboard			Regular 0 13 ▼ ■ Ø I U I				
Aquariums 🕀		Aquarium De	tail Life Maintenance Inventory Measurement Attachments				
Hall		Name:	Hall				
Databases		Created:	23. 6. 2018 🗘 Category: Saltwater				
• Life	12		60 cm 70 cm 200 cm				
Maintenance	75	Dimensions (WxHxL):	60 cm 70 cm 200 cm				
a Inventory	15	Volume:	800 L Calculate				
Measurement	21	Note:	Founded 2018.				
Consumables	5		Life was transferred from a 360 litre aquarium. Unfortunately the assembly and				
All Attachments	10		setting up of the new aquarium took longer than expected, so several interesting animals did not survive the transfer.				
Calculators			The reef was rebuilt twice, after 3 years the final version was installed in the summer				
Volume Calculator			of 22. At the same time I moved the aquarium 10 cm from the wall, and repaired the				
 Salinity Calculator 			painting behind the aquarium. The blue background was removed and replaced with black.				
Effect of Water Excha	ange		The original DSB type filtration was replaced with skimmer, siporax and VOC dosing				
ո kH Calculator			only.				
\delta Ca Calculator			Update Fall 2023.				
琦 Mg Calculator			Ca reactor commissioned Added chaeto with grow light to filter.				
5 Balling			Gradually reduced VOC dosing.				
Guides							

You can always save the completed data by clicking on the top right.

The buttons in the top bar are used to record additional aquarium data.

- * Animals.
- * Maintenance planning and diary.
- * Equipment and equipment records.
- * Measured values
- * Attachments (photos and documents).

2. LEFT COLUMN

The left column is divided into 5 sections.

Dashboard - provides a concise overview of the status for the selected aquariums.

Aquariums - lists created aquariums

Databases - individual database entries for all aquariums

Calculators - specialized calculations

Guides - overview of animals

You can remove the aquarium from the context menu or from the main menu.

You can add an aquarium to the bulletin board by dragging and dropping, or from the context menu.



You can introduce life to the aquarium via the aquarium details, the guide or under Database > Life.

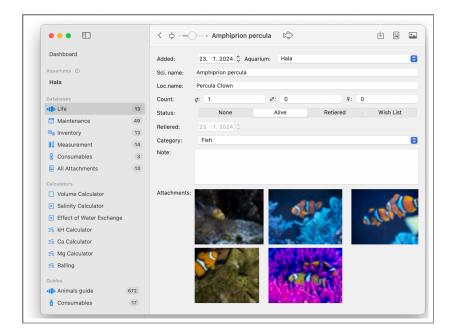
When adding from the wizard, search for the desired animal, open its detail and use the button (1) in the toolbar to

•••		< Acant	< Acanthurus leucosternon				
Maintenance	49		In	formation	Description	My Animals	
💩 Inventory	13	N	Name	Acanthur	us leucosternon	Hala	
Measurement	14	S	Eng. Name	Powder E	Blue Tang		
Consumables	3	Ē	Loc. Name				
All Attachments	13	_	Family	Acanthur	idae		
Calculators		-	Difficulty:	Other	luuo		
Volume Calculator		-					
Salinity Calculator		-	Food	Herbivor	9		
• Effect of Water Exchange		le le	Flow				
🦐 kH Calculator		÷ċ;-	Light				
🏐 Ca Calculator			Min. tank volume	470.0			
\delta Mg Calculator		*	Category:	Fish		\bigcirc	
🏐 Balling			Image:		-		
Guides							
🗤 Animals guide	672						
consumables	17			Credits: Ian	V. Shaw/ Reef Life Survey	CC BY 3.0	

add it to the selected aquarium.

If the desired animal is not in the wizard, we can create its record directly from the aquarium detail or from Database > Life.

The difference is that when adding from the aquarium detail, the aquarium information is filled in, in the latter case



the aquarium has to be selected.

Once the form has been completed and saved using the , additional details can be added using the See Details link.

Additional attributes can be added here. The application will attempt to find a photo for the desired animal on Wikipedia.

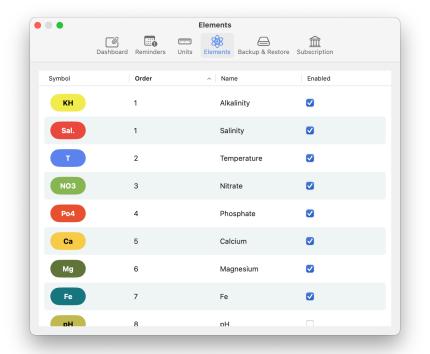
If you don't like a photo you find, you can delete it or insert another one using the context menu or the **Solution** icon on the toolbar.

When entering an animal from the aquarium detail, it is possible to open the list of animals using the button *****, which contains all the animals from the wizard and from the custom list, and from it select the desired record to add to the aquarium.



The application allows you to record the measurement of water values.

When you first start the application, you can select a set of predefined elements, which can be subsequently modified in the Application Settings.



You can input measurement results in two ways: either through the aquarium detail or by navigating to Database > Measurements. In the first option, the Aquarium field is automatically populated, while in the second option, you

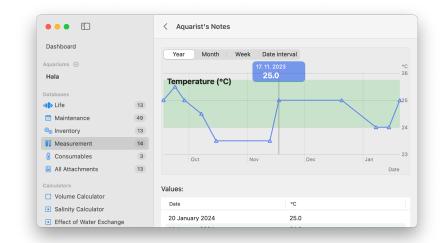
•••		Measurement	i≡ k≥	All Aquariur	ns Ç	(
Dashboard		Date	Alkalinity	Salinity	Temperature	Nitrate
Aquariums		20 January 2024	8.5	0.0	25.0	30.0
Hala		14 January 2024	8.0	0.0	24.0	20.0
Databases		10 January 2024	0.0	0.0	0.0	0.0
Life	13	7 January 2024	8.6	34.0	24.0	12.0
		20 December 2023	8.4	0.0	25.0	20.0
Maintenance	49	17 November 2023	7.7	0.0	25.0	25.0
Inventory	13	15 November 2023	7.7	0.0	0.0	0.0
II Measurement	14	12 November 2023	7.3	0.0	23.5	12.0
Consumables	3	18 October 2023	0.0	0.0	0.0	0.0
All Attachments	13	15 October 2023	7.3	33.0	23.5	8.0
		7 October 2023	8.3	34.0	24.5	4.0
Calculators		28 September 2023	8.3	34.0	25.0	4.0
Volume Calculator		23 September 2023	8.8	0.0	25.5	8.0
 Salinity Calculator 		17 September 2023	8.3	34.0	25.0	5.0

need to manually enter this information.

If you have an ICP test result (Aquaforest and Triton are currently supported), you can import the results by entering the result URL using the Get ICP Result button in the toolbar.

Use 🔄 in the upper right corner to save the completed form.

In the measurement list, you can switch between graph and numeric views using the button in the toolbar.



5. Inventory

The inventory is used to keep track of all your equipment. You can record serial numbers, purchase dates, warranty period price and power consumption.

You can enter the inventory in the same way as for Life or Measurement from the aquarium detail or from the corresponding section in the main screen.

		< ♀+	Tunze Doc Skimmer 9415	⊎	Å: PR	**
Dashboard		Aquarium:	Hala			٢
Aquariums 💮		Purchased:	10. 12. 2020 🗘			
Hala		Name:	Tunze Doc Skimmer 9415			
Databases		Waranty to:	10. 12. 2022 🗘 🗸			
🗤 Life	13	Serial:	Serial			
Maintenance	49	Price:	13 608			
anventory	13	Supplier:	www.morskeakvarium.eu			
Measurement	14					
Consumables	3	Power consumption:	35 W Running time: 24		Hou	ır/Day
All Attachments	13	Note:				
Calculators						
Volume Calculator						
 Salinity Calculator 		Attachments:				
 Effect of Water Exchange 						
🛸 kH Calculator						
萒 Ca Calculator						
🏐 Mg Calculator			Faktura 200102383 odf			

Use the 🗟 button in the bottom bar to attach any number of attachments to the record, such as photos, invoices manuals and other documents.

For a photo from the Photo Album only the link to the photo is saved, if you delete this photo in the Photo Album this attachment will be unavailable.

Save the form by clicking in the top right corner.

If you fill in the power input and the daily operating time in the record, you can see an overview of the total power consumption in the list of devices using the 🕑 button.

You can enter the price per unit of energy in the application settings \mathfrak{B} .

6. MAINTENANCE & JOURNAL

The maintenance and diary sections are used to plan, notify and record important aquarium maintenance conditions.

You can create a record from the aquarium detail or from the Database > Maintenance section using the button \Box .

	Maintenand	Maintenance							
Dashboard		January	January 2024 < Today >						
Aquariums 🕀									
Hala		Mon	Tue	Wed	Thu	Fri	Sat	Sun	
		1.01.	2.	3.	4.	5.	6.	7.	
Databases								Water chang	
📢 Life	13	8.	9. 10.	10.	11.	12.	13.	14.	
Maintenance	49	AF phosphat						Measureme.	
◎ Inventory	13	15.	16.	17.	18.	19.	20.	21.	
Measurement	14							Measureme	
Consumables	3	22.	23.	24.	25.	26.	27.	28.	
All Attachments	13							Measureme.	
		29.	30.	31.	1.02.	2.	3.	4.	
Calculators								Measureme.	
Volume Calculator									
 Salinity Calculator 		Measureme	n Kh, Ca, Mg	I				>	
Effect of Water Exchance									

There are buttons in the toolbar that switch the views of the records.

- Displays a monthly view of records.
- 🗄 Displays a daily view of the records.
- \equiv Displays an overview of all records

Views other than the monthly view can be further filtered by type and completion.

When you create a new record, you can select between maintenance and journal type in the form.

You can assign a tag to each record. The list of tags used is predefined and you can customise them according to your own requirements.

Journal entry - here you fill in only the Aquarium, tag, title and text.

Maintenance type record - here you can also fill in the planned date of execution, or set the task to repeat. If integration with Reminders is enabled in the Application Settings, then the record is also created in the system Reminders application.

7. consumables

The Consumables section is used to keep track of consumables - e.g. phosphate remover, activated carbon, various solutions for supplementing elements or feed.

The application requires you to enter the expected shelf life of the material in days, the time from which the consumption will be calculated and the delivery time if the material is ordered online.

		< AF Re	F Reef Salt						
Dashboard	Name:	Name: AF Reef Salt							
Aquariums		Deployed:	23. 1.2024 🗘		Duration	90		Day	
Hala		Status:	Not defined	Not defined Consumption Or			Ordered Consum		
Databases		In Stock:	0		Delivery time	0		Day	
🕕 Life	13	Order on:	22 April 2024		URLs: 🕀				
Maintenance Maint	49 13 14 3 13	Note:	Reef Salt - is a fully salt content has bee breeding of marine a the needs of corais Bromides, and can i or growth media like The salt does not co Preparation: Salt should be disso should be 24°C. To about 3.95Kg in 100	n selecte animals. I for health be used w Probiotic Intain any Ived in pr btain a si litres of w	d to create the be contains micro a contains micro a growth and cold ith Ozone filtratic Salt. Po4 and No3! epared deminera alinity of 34PSU (after. The solutio	est possible e ind macro el pration. The s in. Contains lised water, y 1.025 SG) y s should be s	conditions for ements that salt does not no probiotic the water ten ou need to d	r the satisfy all contain bacteria nperature issolve usly for	
Salinity Calculator			about 15 minutes. After dissolving and obtaining complete clear water used for water change. (After mixing the water should be used within The sait should be stored in a dry and dark place. Mixed water parametere -						

It is also possible to store the URL addresses from which the material is usually ordered for faster creation of the next order.

If you have more than one pack in stock, then enter the number of packs. The application will calculate a suitable date to create the next order and if you have enabled reminders in your settings, a reminder will be created for that date, including the material name and URL if applicable.

9. calculators

Calculators are used to simplify the necessary calculations in aquarium keeping.

The Volume Calculator

Calculates the volume of the aquarium and the net water volume depending on the size of the aquarium and the amount of decorations. The calculated value can be entered into the record of the selected aquarium using the 🕁 button in the upper right corner.

Salinity calculator.

The Adjustment section simplifies the calculation of the amount of salt needed when preparing the required amount of water or when salinity adjustment is required.

In the Conversion section, it converts salinity units between each other and taking into account the temperature dependence.

Effect of water Exchange.

The calculator calculates the change in concentration when the water is changed.

The input parameters are the total volume of water, the volume of water exchanged, the number of exchanges after which we want to know the result of the change in concentration.

Furthermore, the initial concentration, the increase in concentration between exchanges and, if applicable, the concentration in the exchanged water. The result is a chart that shows the change after the desired number of exchanges.

Kh Calculator

Calculates the amount of chemicals needed to increase Kh.

The recommended daily change is a maximum of 1 Kh. Therefore, the total calculated dose needs to be divided according to the required increase.

When selecting an aquarium, the application will try to find the last known Kh value and add it to the Current alkalinity field.

Ca Calculator

Similar to the Kh Calculator, it calculates the required amount of selected chemicals to achieve the desired calcium value.

Mg Calculator

Similar to the Kh and Ca Calculator, it calculates the required amount of selected chemicals to achieve the desired magnesium value.

Balling

The Balling method in marine aquariums is a method of replenishing calcium, magnesium and carbonate consumed in the development of the supporting structures of living forms.

Hans-Werner Balling, based on the reactions behind the formation of the skeleton of stony corals and other living organisms, proposed this method of replenishing the consumption of these three elements without changing the ionic balance of the seawater. It uses calcium chloride, magnesium chloride and sodium bicarbonate (common sodium bicarbonate) in a ratio calculated from the molecular weight of each element.

Calcium, magnesium and carbonate ions are bound together in the coral and the remaining sodium and chlorine form sodium chloride, which is already the main component (about 70 %) of sea salts.

By frequent water changes or the use of low sodium chloride synthetic salt, excessive accumulation of sodium chloride can be prevented.

Using this method has the undeniable advantage that it does not alter the pH of the aquarium like a calcium reactor; one does not have to worry about having a low pH and therefore will have to sensibly add carbonates (Kh) to stabilise the pH by acting as a buffer. The use of clean materials also eliminates the problem of adding phosphates to the aquarium.

Source: https://it.wikipedia.org/wiki/Metodo_Balling

The calculator relies on this method for its calculations. In the initial screen, you can either choose a pre-existing solution recipe or create your custom recipe.

In the second screen you select the aquarium. The app will try to find the last two measurements of Kh, Ca and Mg values and calculate the consumption from them. If you know the daily consumption, you can enter it in the appropriate fields.

In the third screen, it will list the resulting daily dosage of solutions. It is beneficial to divide the resulting values into multiple daily doses.

If you choose to dose dry salt, never pour it directly into the aquarium!

If you do not know your daily consumption, proceed as follows:

Measure the Kh,Ca, Mg values using appropriate tests and record in the app.

Continue to take measurements 1 x per week until the values drop noticeably (approx. 10 ppm). Record these measurements in the app and then use them for the calculation.

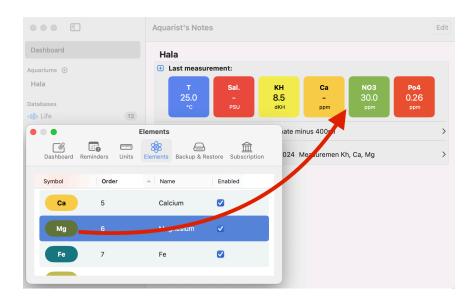
10. Dashboard

The Dashboard shows a quick overview of the selected aquariums.



Add an aquarium to the Dashboard from the aquarium context menu or by dragging the aquarium in the left panel to Dashboard.

Elements can be added to the Dasboard from the list of Elements in the application settings from the context menu, or by dragging and dropping.



Removing items from the Dashboard is possible by pressing the Edit button in the toolbar.

11. Setup

The application settings can be accessed via the Aquarist's Notes > Settings main menu item.

Attention: when changing the element set, the settings of the previous set are lost. However, the measurement values are retained and can still be displayed.

It is also possible to edit the set of elements, change their names, format, colors. You can add a new element using the context menu in the element list

12. USING iCloud

The app uses iCloud for data storage. If you are logged in on the device, the app will automatically store data to your personal iCloud account and count towards your storage limit.

The author of the app has no ability to operate on your data, view it, edit it or delete it.

If you don't want to use iCloud in this app, after installing the app and launching it for the first time, go to Settings -> iCloud -> Applications -> Aquarist's Notes and turn off iCloud for this application

Along with this, however, you will lose access to the shared animal database.

If you keep iCloud turned on, you'll have the same data in the app on all your devices under the same iCloud account, in addition to access to the shared animal database.

If you delete and reinstall the app, the data in the app will be restored to the state it was in before you deleted the app.

Delete records from iCloud

If you want to delete the app, including the data on iCloud, you must delete the data from the app before deleting it.

Follow these steps:

Go to the application settings and select Delete all records from the Backup & restore tab. All records you have created in the Aquarist Notes app will be deleted.

You can then delete the application as well.

If you removed the app before following this procedure, reinstall it, wait for the data to sync, and then follow the steps above.

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