

User Research Analysis

for FishCast

1. Survey
2. Interviews
3. Affinity Mapping
4. User Insights

1. User Survey

- **via Google Forms**
- **29 Participants**

User Survey - 29 Participants

Conducting a User Survey using google forms I expect to be able to specify my main target group and get a general overview who might be interested in using FishCast. I used digital services as facebook, instagram & online meeting places as Barschalarm & Anglerboard to spread my online survey. Thus I ensure to reach out to anglers who are able to use digital devices or who have preferences in using digital devices. Further I like to know which weather data might be interesting for my target group and how they determine their fishing spots to get input.

1 Gender

- Female
- Male
- Other

2 Age

- 12-20 years
- 20-30 years
- 30-40 years
- 40+

3 Your Fishing experience:

- 1-6 years
- 6-15 years
- +15 years

4 Which fish species do you prefer to catch?

5 Do you check the weather before you go fishing?

- Yes
- No

6 Which Weather Data are interesting for you concerning fishing?

- Weather (Sun/Cloudy)
- Rain
- Air Pressure
- Tide
- Water temperature
- Wind
- Other_____

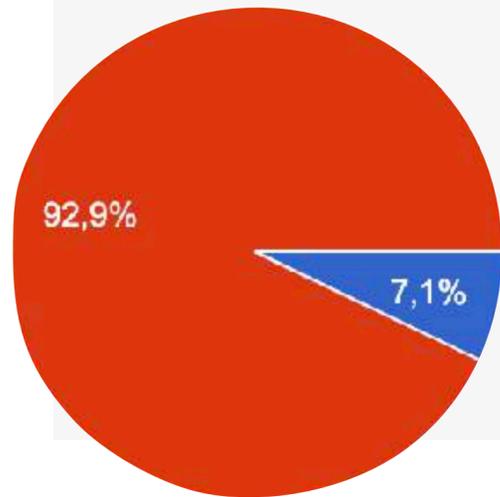
7 Do you use fishing apps or other digital services related to fishing?

- Yes
- No

8 How do you determine new fishing spots?

- Google Maps
- Recommendation
- Guiding Books
- Other_____

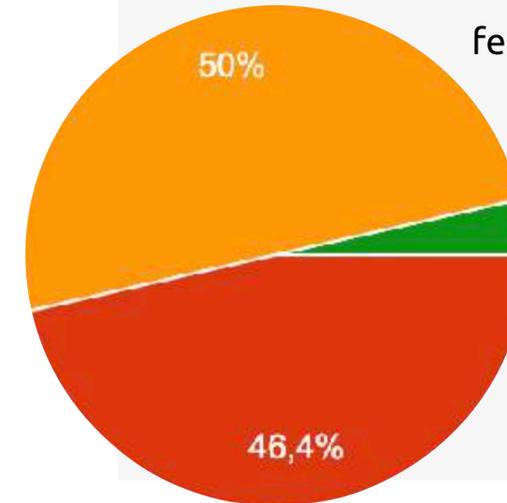
1 Gender



Over 90% of anglers are males. This definiteness allows me to put a clear focus on a male target group in any design decisions.

- Male
- Female
- Divers

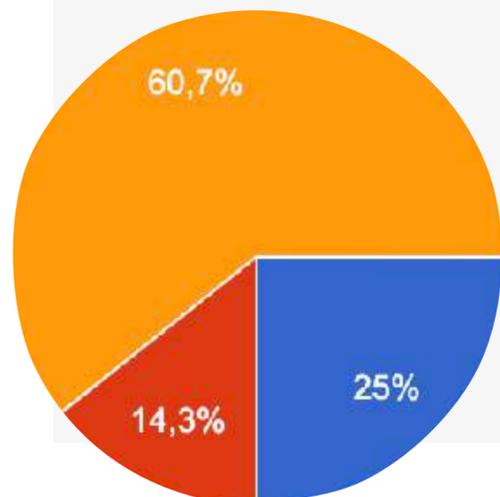
2 Age



My main target group will be between 20 - 40 years old. Due to the fact that I used digital devices to spread the online survey. I'll ensure to reach out to fishing people who feel comfortable in using digital devices.

- 12-20
- 20-30
- 30-40
- 40+

3 Fishing Experience



60,7% of the participants have over +15years of fishing experience. It shows that checking the weather and determining spots are still a main on of the main challenges for an experienced angler as well as for a beginner.

- 1-6 years
- 6-15 years
- +15 years

4 Which fish species do you prefer to catch?

3x Predator

Predator, White Fish

2x Predator, Carp, Catfish

Carp, Catfish

Carp, Bream, Tench, Barbel

3x Perch

2x Perch, Zander

5x Perch, Zander, Pike

Perch, Zander, Pike, Asp

Perch, Zander, Bream

Perch, Zander, Catfish

2x Perch, Zander, Char

Perch, Char

Perch, Zander, Pike, Catfish, Smallmouth Bass,
Sea Bass, Asp, Trout

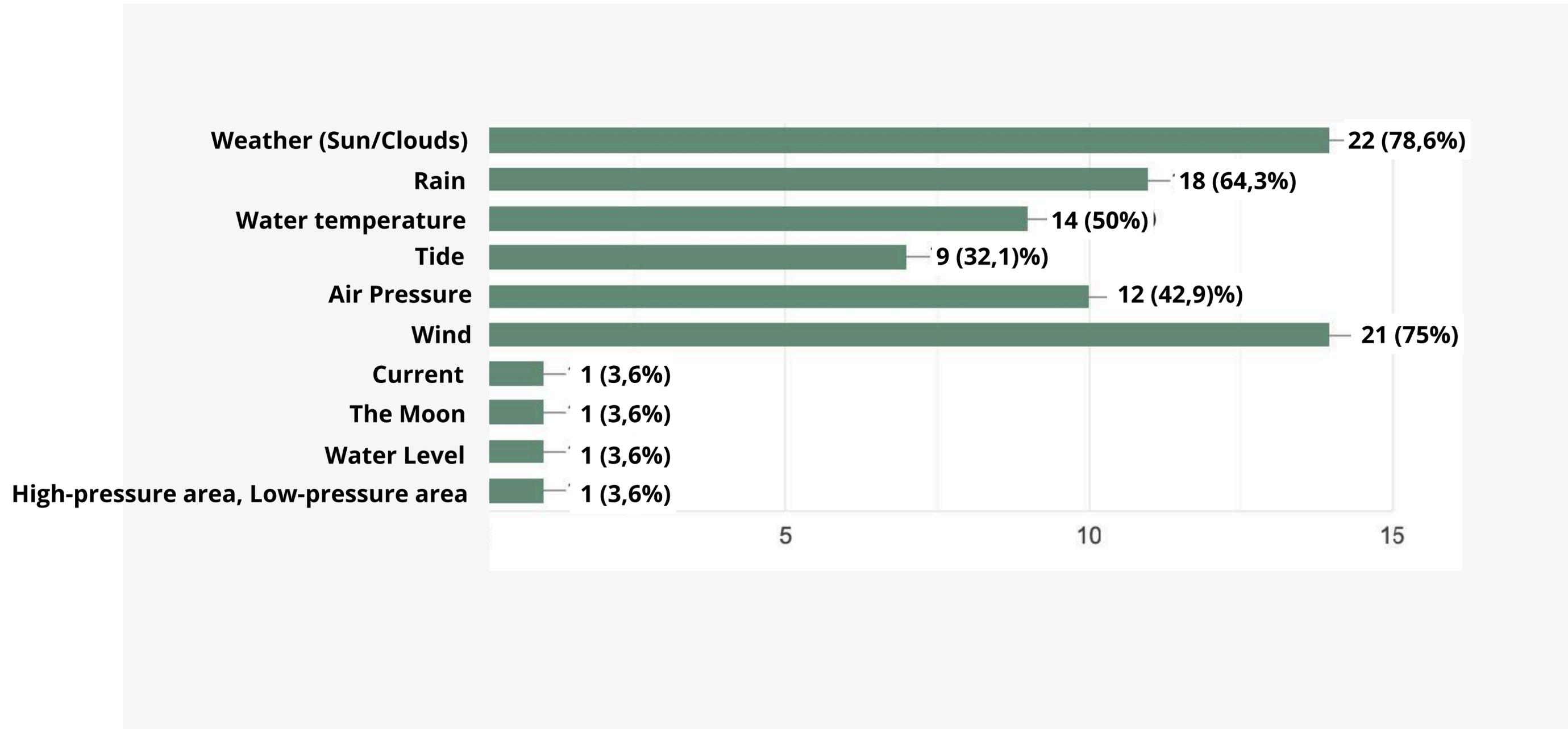
Perch, Zander, Pike, Salmon, Trout

Perch, Pike, Trout, Chub

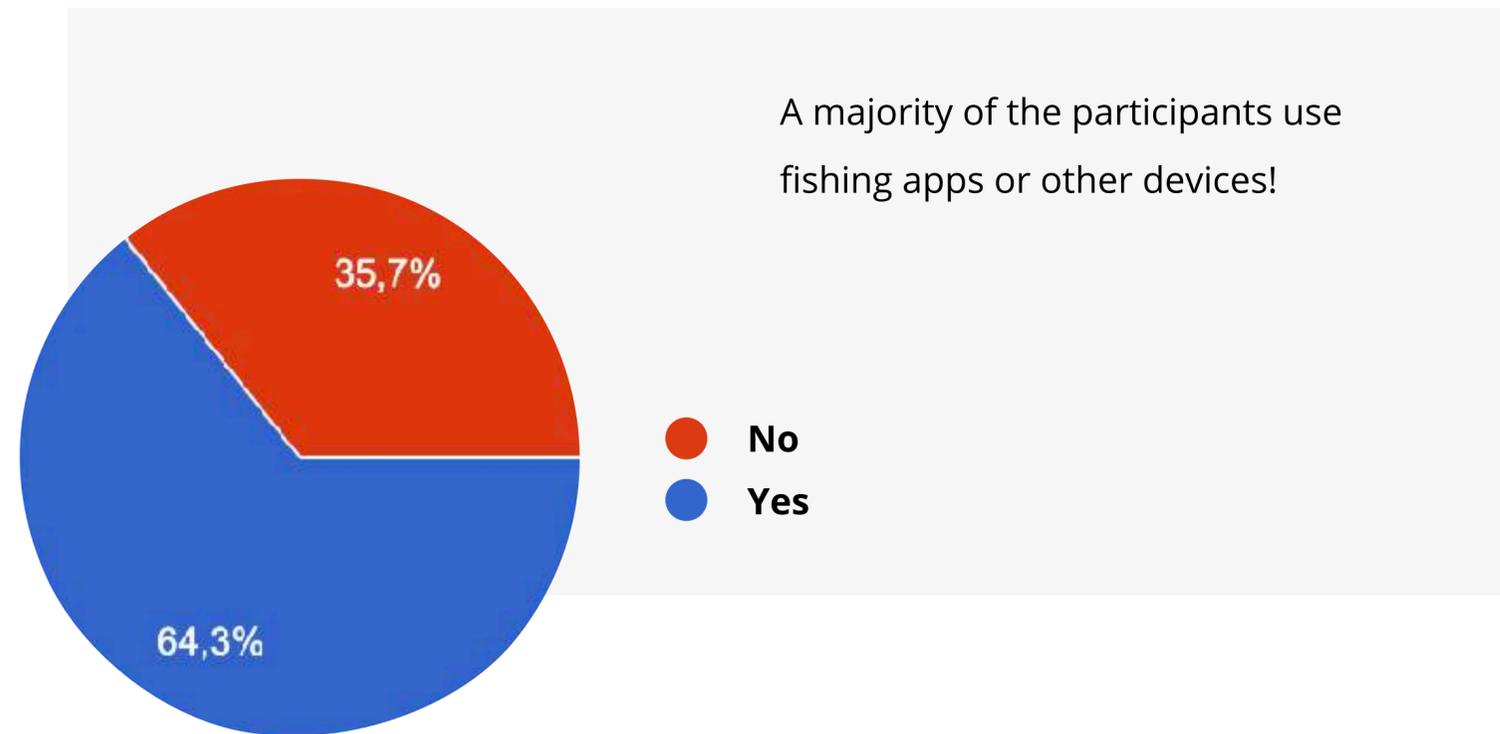
Cod, Paice, Trout, Perch, Zander, Pike

According to the participants fishing predators in general is more popular than prey fishing, especially angling Perch, Zander & Pike! However, I still question to put main focus on predator fishing, because fishing other species might deal with a stronger dependence to weather conditions.

5 As an Angler which Weather Data are important for you?



6 Do you use fishing apps or other digital services related to fishing?



7 How do you determine new fishing spots?



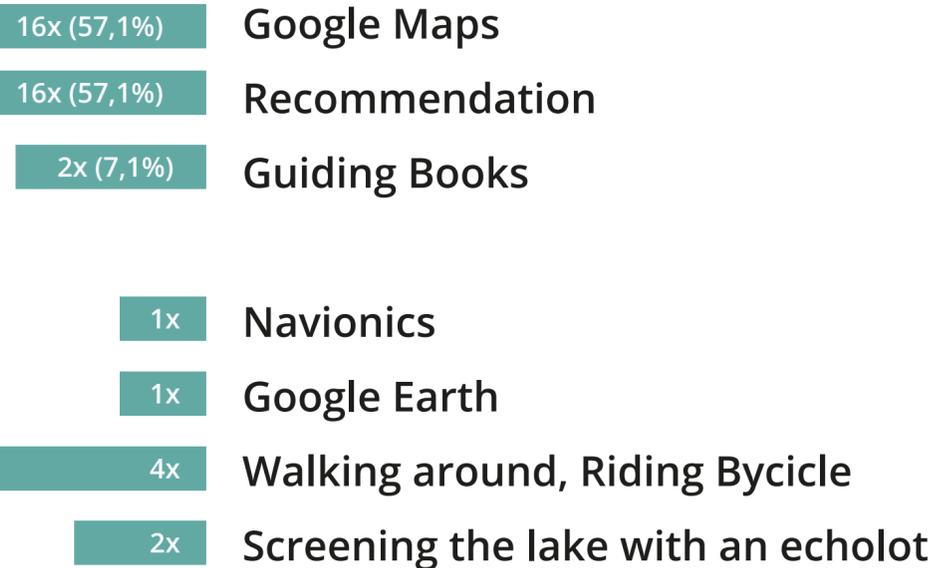
Google Maps and Recommendations are the popular tools to explore new spots.

Survey Summary

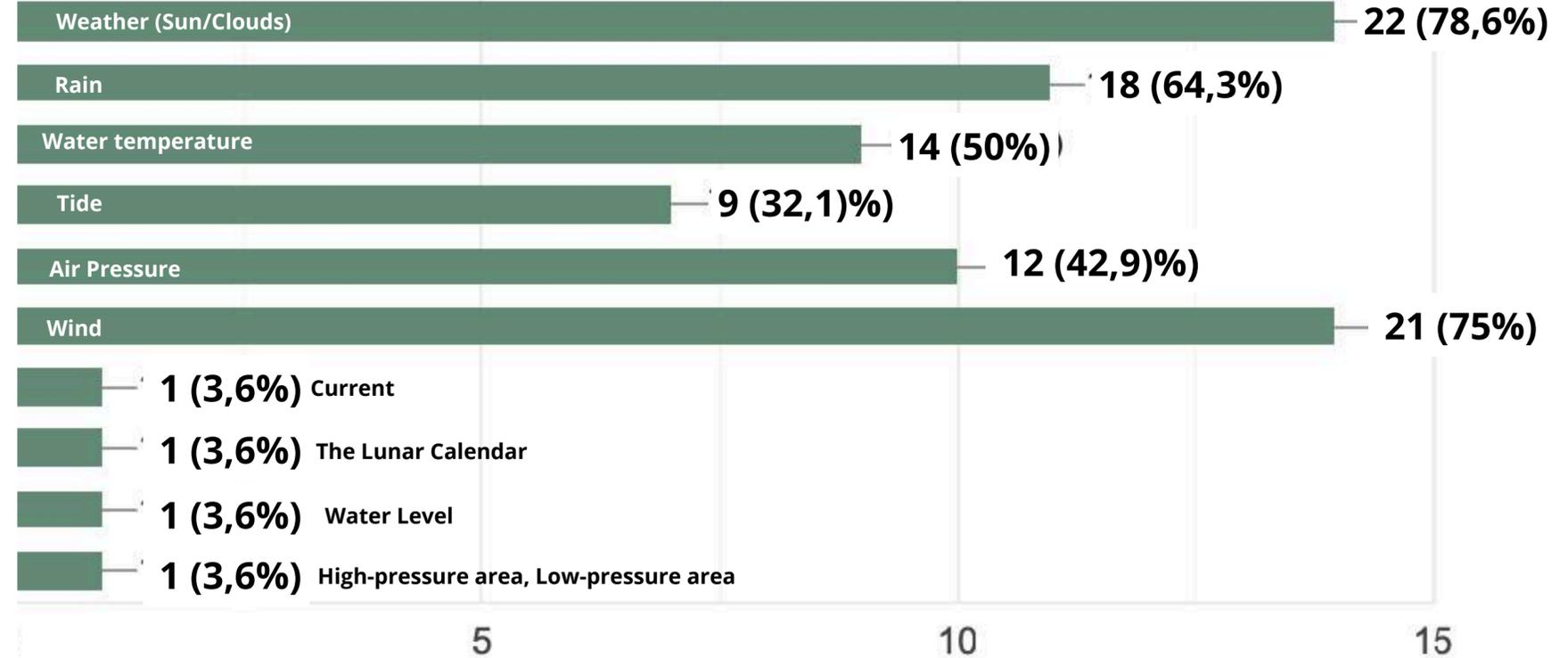
Main target group: Male 20-40years

Preference in fishing predators

Looking for new spots:



Weather Data:



2. Interviews

- 4 Participants
- + User from Barschalarm (Forum)

Interview 1

Bohne, 36

User 1: Bohne, 36

Paderborn / 4 years fishing experience / Spin Fishing, Bellyboat, Streetfishing / Sweetwater Lakes, Canal, River / Perch, Zander, Pike

1 What is your favorite app. What do you like about it?

Netflix! - Great app for relaxing. I like that they recommend movies or series, which might fit my taste. It makes life easier.

2 When was the last time you've checked the weather and which websites apps do you use? Comparing to other devices why do you use...?

That was just today, because after work I want to go fishing on the lake with my bellyboat. I used DWD, Wetteronline, Google Weather and another app. (Participant forgot the name) I always use several sources and compare them to ensure to get a reliable overview. I just trust in overlapping informations from all my resources. Wetteronline is great to see how conditions develop over the day, so I can determine the best time to go fishing. DWD is great, because they provide the weather data from my nearby located Weather Station.

3 Do you use any other fishing app or digital devices for fishing? Why why not?

When I have started to fish again, I downloaded the Fishing & Hunting - Sonular Time for 2,50€. I should have bought a new bait instead! The app was not reliable. When they told me fish activity is high I did not catch anything. I deleted the app. I would have preferred recommendations like which colors my bait should have today!

4 Which weather data do you think would be useful in a weather app made for anglers in general? Which Weather Data are important for you and why are they important for you?

Warnings about a thunder storm. Swimming in the lake with my belly boat would be too dangerous then. Water suspension, so that I can prepare my tackle and know which bait colors to use. And UV Index is important for me. Spending a lot time on the water I need to protect my skin and head from sunburn. Further If the UV Index is higher than usually, the fish prefer protected spots in the shadow. A longterm forecast and review would be helpful to check if the conditions are constant. This is especially important for fishing Zander.

5 Do you take your smartphone when you go fishing? Why? Why not?

Yes, I take it always with me. I like to have it with me in case of any emergency, to stay in contact with friends and family and of course to take pictures of my catch.

User 1: Bohne, 36

6 Imagine tomorrow evening is the only chance for you to go fishing! The weather forecast says its going to be quite windy and rainy, but you definitively want to go! How do you prepare yourself to enjoy this trip under theses circumstances?

I would put my rain coat on and choose a protected spot. After 4 years fishing experience I know some spots, which are protected. For example the Maggelanterassen in Hamburg. I don't like it there , but its protected.

7 How could a digital service help you with that?

A wind and rain map would be great. I could check from which direction the wind is coming and if my spot is really protected from rain. Something like spot suggetions nearby would be great.

8 Which fishing area / Water is still on your bucket list?...Now imagine a friend asks you to go to.... for a weekend trip. Its your job to determine the fishing spots and plan a route. How would you do that?

I'd love to fish in a huge dam like Möhnesee. Determining spots for such a huge water I would try to get a depth chart of the lake, so that I know where we'll find ditches, hills or other interesting structures. To create an own chart would take too long. Some fishingshops or town halls provide depths charts. If not I would buy the app Navionics, which provides charts from nearly every lake world wide, but it's really expensive. Further I would love to fish in the canals of Groningen. Google Earth helps me to spot bridges or parts of river, which get tighter or wider.

9 Tell me about your favorite fishing spot at the moment? What do you like about it and would you recommend it to others? Why? Why not??

At the moment its the middle of my favorite lake. The last times I caught really nice fish at this spot. The structure of the ground is great: some hills and holes to hide. I would not tell. I do not want others to fish there. The fish will get used to anglers and start looking for a new place to rest.

10 After plenty unsuccessful fishing days at your spot you realize this spot is dead! Describe your strategy to find a new great spot!

I would take a look at my depth chart and look for hills or other structures on the ground.

User 1: Bohne, 36

11 Imagine a person tells you about a new great spot, but it takes a bit more effort to go there! You're arguing with yourself if you should give it a try or stay at your well known spots nearby. Picture the person: Who or how needs the person to be or argue that you definitely give it a try? Tell me about anything that might convince you?

I need to know the person to judge how reliable these informations might be! I would not believe a stranger and change my spot. Fishing people exaggerate! I trust in recommendations of friends.

12 Would you use a weather data app for anglers? If yes, why? If not, which features or functions might convince you to use it?

I would use it! It would be great to have a tool which provides the weather data the way I need it as an angler. I'd love to have explanations like what a higher air pressure means!

Summary: Bohne, 36

Paderborn / 4 years fishing experience / Spin Fishing, Bellyboat, Streetfishing / freshwater lakes, Canal, River / Perch, Zander, Pike

Behaviors & Attitude

After work likes to go fishing on the lake with his bellyboat.

Uses DWD, Wetteronline & Google Weather to check the forecast.

Always uses several sources and compare them.

Trusts in overlapping informations from all his resources

Thinks if the UV Index is high, the fish prefer protected spots in the shadow.

Likes to take pictures of his catch.

Takes his phone to the water in case of any emergency

4 years fishing experience he knows spots, which are protected.

Does not like fishing at the Maggelanterassen, but its a protected spot.

Looks for ditches, hills or other interesting structures on depth charts

Create an own depth chart of huge unknown lake would take too long.

Uses Google Earth to spot bridges .

Uses Google Earth to spot narrowing parts of a river.

Thinks Navionics is an too expensive app (60€)

Would ask for a depth chart in fishing shops

Would ask for a depth chart in town halls

Trusts in recommendations from friends.

Fishing people like to exaggerate.

Summary: Bohne, 36

Paderborn / 4 years fishing experience / Spin Fishing, Bellyboat, Streetfishing / freshwater lakes, Canal, River / Perch, Zander, Pike

Needs & Goals

Needs a reliable forecast.

Fishing from the Belly Boat he needs a reliable and exact warning from thunderstorms.

Need Informations about Water Suspensions, to adjust his bait tackle.

Wishes recommendations which colors his bait should have today.

Does not want to sunburn.

Needs the UV Index.

Needs a protected fishing spot, if its windy & rainy outside.

Needs a raincoat, if its windy & rainy outside.

Needs informations about wind directions to check if the spot is really protected from rain.

Needs a depth chart to determine spots in a lake.

Needs to know the person to evaluate how reliable a spot recommendation might be.

Needs a detailed weather forecast for every part of the day to determine the best time to fish

Needs a weather review to plan a fishing trip to the Netherlands (Zander fishing)

Needs a 7 days longterm prognosis to plan a fishing trip to the Netherlands (Zander fishing)

Friction Points

Didn't like the app Fishing&Hunting.

Hates unreliable fish activity prognosis.

Doesn't like anglers fishing at his favorite spot

Quotes

„ DWD is great, because they provide the weather data from my nearby located Weather Station..“

„A spot search feature would be great.“

„Something like spot suggestions nearby would be great.“

„A wind and rain map would be great.“

„I'd love to have explanations like what a higher air pressure means!“

Interview 2

David, 32

User 2: David, 32

Hamburg / +15 years fishing experience / Spin Fishing, Streetfishing / Sweetwater Lakes, Canal, River / Perch, Zander, Pike, Breams

1 What is your favorite app. What do you like about it?

I love DMI. Its a danish wind forecast app I use to go windsurfing.
The app is very simple, but reliable.

2 When was the last time you've checked the weather and which websites apps do you use? Comparing to other devices why do you use...?

Yesterday, I checked the weather and used wetteronline - the website not the app. It has a simple structure and provides the most reliable weather forecast.

3 Do you use any other fishing app or digital devices for fishing? Why why not?

No, I do not use any. I go fishing, if I like to and if it fits to my time schedule. Fishing is relaxing time. If I do not catch anything I don't mind. Its not a competition for me. So I not really interested in digital tools who help me to catch fish.

4 Which weather data do you think would be useful in a weather app made for anglers in general? Which Weather Data are important for you and why are they important for you?

Tide is important for fishing Zander here in Hamburg. Air Pressure might be interesting, the water and air temperature and if its rainy, cloudy or sunny. A rain forecast is important for me, so that I know which clothes I have to wear.

5 Do you take your smartphone when you go fishing? Why? Why not?

Yes, I take it always with me. I just use it to communicate with friends and my family.

6 Imagine tomorrow evening is the only chance for you to go fishing! The weather forecast says its going to be quite windy and rainy, but you definitively want to go! How do you prepare yourself to enjoy this trip under theses circumstances?

I would put my rain coat on and choose a protected spot.

User 2: David, 32

7 How could a digital service help you with that?

A spot search feature would be great. If I could ask the App please tell me spots nearby which are protected of wind and rain!

8 Which fishing area / Water is still on your bucket list? ...Now imagine a friend asks you to go to.... for a weekend trip. Its your job to determine the fishing spots and plan a route. How would you do that?

I like to go fishing at the See Hinterm Horn. Its a small lake. I would just drive to this place and look for spots who are easy to access the water.

9 Tell me about your favorite fishing spot at the moment? What do you like about it and would you recommend it to others? Why? Why not??

My favorite spot is a little ponton under a bridge at the Bille. I love this spot because I caught a lot of perches there. I wouldn't tell, because its just a small place. I do not want to risk to loose this spot.

10 After plenty unsuccessful fishing days at your spot you realize this spot is dead! Describe your strategy to find a new great spot!

My girlfriend has a list of possible spots in Hamburg. I would take a look at the list and try to find a new spot.

11 Imagine a person tells you about a new great spot, but it takes a bit more effort to go there! You're arguing with yourself if you should give it a try or stay at your well known spots nearby. Picture the person: Who or how needs the person to be or argue that you definitely give it a try? Tell me about anything that might convince you?

I need to know the person to judge how reliable these informations might be! If I would not be at home and do not know somebody, who might give me an advice, I would give it a try. Why not trust a stranger?

12 Would you use a weather data app for anglers? If yes, why? If not, which features or functions might convince you to use it?

No I would not. I go fishing, when I have time to fish, but I check the weather before go fishing. I like to prepare my clothes for the fishing trip.

Summary: David, 32

Hamburg / +15 years fishing experience / Spin Fishing, Streetfishing / Fresh water: Lakes, Canal, River / Perch, Zander, Pike, Breams

Behaviors & Attitude

Goes fishing, if he likes to and if it fits to his time schedule.

Fishing is relaxing time.

Does not mind to catch nothing.

Uses the website of wetteronline to check the weather forecast.

He always takes his phone to the water.

On site he looks for spots who have an easy to accessibility to the water.

Uses girlfriends list of saved & collected spots on google maps.

Checks the weather before he goes fishing.

Takes any spot recommendation in areas where he never fished before.

Needs & Goals

Wants to check the rain forecast.

Wants to know which outdoor clothes he should to wear for fishing.

Needs to check the Tide to evaluate spot and time for fishing Zander in Hamburg

Needs a protected fishing spot, if its windy & rainy outside.

Needs a raincoat, if its windy & rainy outside.

Wants to be available for friends & family.

Wants to keep his favorite spot secret, because other anglers might occupy it.

Needs to know a person to judge how reliable a spot recommendation might be. (Known waters)

Friction Points

Doesn't like fishing apps.

Doesn't like anglers fishing at his favorite spot

Quotes

„Wetteronline has a simple structure and provides the most reliable weather forecast.“

„A spot search feature would be great.“

„If I could ask the App please tell me spots nearby which are protected of wind and rain!“

Interview 3

Basti, 33

User 3: Basti, 33

Munich / 3 years fishing experience / Spin Fishing, / Sweetwater Lakes, Canal, River / Perch, Pike, Trouts, Char

1 What is your favorite app. What do you like about it?

Instagram. I like all the Input from different people. I also use it for fishing. I'm following several fishing personalities from and around Munich.

2 When was the last time you've checked the weather and which websites apps do you use? Comparing to other devices why do you use...?

Last Thursday I used Wetteronline. The app provides a *Regenradar* and a forecast, which is clearly structured. I can rely on this app. Further they provide informations about pollination, which important for me as an allergic person. I also check theWeather before I go fishing.

3 Do you use any other fishing app or digital devices for fishing? Why why not?

I use the app *AlleAngeln*, which is a social media channel for fishing people. When I've determined my spot, I'll like to check if and what other anglers might have caught here. On site I use the App *Fish Deeper*, which is connected to my mobile sonar. It helps me to check out the ground structure and where the fish might hide!

4 Which weather data do you think would be useful in a weather app made for anglers in general? Which Weather Data are important for you and why are they important for you?

Before I go fishing I like know which clothes will fit to the weather conditions: raincoat, shorts or a warm jacket? Therefore I check general weather information as rain, clouds, sun & temperature. Here in Munich we have a lot of calm canals, who turn into torrential rivers after 3 days of raining! So I also check the weather review

5 Do you take your smartphone when you go fishing? Why? Why not?

Yes, I take it always with me. I like to have it with me in case of any emergency, to stay in contact with friends and family and of course to take pictures of my catch. If I'm fishing in an unknown area, I need my phone to get orientation!

6 Imagine tomorrow evening is the only chance for you to go fishing! The weather forecast says its going to be quite windy and rainy, but you definitively want to go! How do you prepare yourself to enjoy this trip under theses circumstances?

I would put my rain coat, rain trouser and gum boots on and choose a protected spot, which is close to a parking place. Further I would try to find out which bait tackle I need to fish under these conditions. Maybe the shop assistance in a tackle shop can help me!

User 3: Basti, 33

7 How could a digital service help you with that?

A very detailed weather forecast for my spot would be helpful, so that I know how I prepare my equipment for the next hours. Informations about the water level and current would be great so that I can adjust my tackle. And information about there trees in this area, which might be dangerous under too windy conditions. Warnings from upcoming thunderstorm are necessary!

8 Which fishing area / Water is still on your bucket list? ...Now imagine a friend asks you to go to.... for a weekend trip. Its your job to determine the fishing spots and plan a route. How would you do that?

I'd love to go deep sea fishing. To prepare this trip I would book a professional guiding, because I neither have the tackle nor any knowledge about it. But another water on my bucket list is the *Mecklenburgerische Seenplatte*. First I would check out, where to buy a fishing license - maybe in tackelshops nearby! Further I need a depth chart of the lake. I would google and l search through online meeting places for spot recommendations for fishing from the boat and fishing from the shore. Further I like to know what kind of fish live in the water, so that I can prepare my tackle. I would try to find out which effect the weather conditions might have on the behavior of my fish in this lake! With all informations I would determine several spots.

9 Tell me about your favorite fishing spot at the moment? What do you like about it and would you recommend it to others? Why? Why not??

It's a little river nearby! I can walk and fish along the river for several kilometers: It's a little fishing hike! So its a very sporty method of angling. I can enjoy the nature. You can catch plenty of Chubs and Trouts in here. I would recommend this spot to everybody! My first year of fishing was a disaster. I was so thankful for any advice. So why should I keep my secrets. That's not fair.

10 After plenty unsuccessful fishing days at your spot you realize this spot is dead! Describe your strategy to find a new great spot!

I would check if the river has some branches, because conditions there might be similar to my recent spot. This part of the river might belong to a different tenant. If yes I need to get another license. I would walk along and explore the new possible spots or ask the tenant or other members of the fishing club for recommendations.

User 3: Basti, 33

11 Imagine a person tells you about a new great spot, but it takes a bit more effort to go there! You're arguing with yourself if you should give it a try or stay at your well known spots nearby. Picture the person: Who or how needs the person to be or argue that you definitely give it a try? Tell me about anything that might convince you?

If he's convincing enough I would give it a try! Why not. I received the best spot recommendation from members of a fishing club and of my friend Michael. He knows so much about fishing. I can be sure to enjoy a successful fishing trip with him.

12 Would you use a weather data app for anglers? If yes, why? If not, which features or functions might convince you to use it?

I would use it! It would be great to have a tool which provides the weather data the way I need it as an angler. I'd love to have explanations like what a higher air pressure means!

User 3: Basti, 33

Munich / 3 years fishing experience / Spin Fishing, / Sweetwater Lakes, Canal, River / Perch, Pike, Trouts, Char

Behaviors & Attitude

Follows popular fishing personalities from and around Munich on Instagram

Likes Input from different people

Uses *Wetteronline* to check the weather forecast

Thinks *Wetteronline* provides a reliable weather forecast

Uses the *Regnradar*.

Does check the Weather before fishing.

Uses the Social Media App *AlleAngeln*

Likes to check if other anglers have already succeeded in his spot.

Uses *Fish Deeper*, an app for his mobile sonar

Likes to take pictures of his catch

Asks the shop assistance in a tackle shop for tackle recommendations

Does not like to fish under trees, if its too windy

Would book a professional guide for a deep sea fishing trip

(Unknown Water) Checks if a fishing license is necessary

Would ask a fishing shop assistant if a fishing license is necessary

Searches through online meeting places for spot recommendations

Uses Google to look for spot recommendations

Loves a more active & sporty way of angling : Fishing & Hiking.

Suits his bait tackle to weather conditions

Thinks a good spot is just where you catch a lot of fish

For a new similar Spot, he would first check out the river branches.

Would book a professional guide for a deep sea fishing trip

(Unknown Water) Asks fishing club members for recommendations.

(Unknown Water) explores new possible spots by foot

User 3: Basti, 33

Munich / 3 years fishing experience / Spin Fishing, / Sweetwater Lakes, Canal, River / Perch, Pike, Trouts, Char

Needs & Goals

Needs a reliable Weather forecast

As an allergic person he needs informations about pollination.

Needs to check the ground structure of a water to see where the fish might hide.

Wants to know which outdoor clothes he should to wear for fishing.

Needs know general weather information as rain, clouds, sun & temperature

Needs his phone to get orientation

Needs a protected spot, if its rainy & windy

Needs a spot close to a parking place, if its rainy & windy

Needs a very detailed Weather forecast for his spot

Needs a weather review.

Needs a rain review to check if his little canal turned into a torrent river

Needs informations about the waterlevel & current to adjust his tackle.

Needs warnings from upcoming thunderstorms

(Unknown Water) Needs a depth chart of a lake

(Unknown Water) Needs spot recommendations for fishing from the boat

(Unknown Water) Needs spot recommendations for fishing from the shore

(Unknown Water) Needs to know which fish live in the water

(Unknown Water) Needs to know which effect the weather conditions might have on the behavior of my fish in this lake

Friction Points

Does not like unreliable fish activity prognosis.

Quotes

„I was so thankful for any advice. So why should I keep my secrets(spot).“

„If I could ask the App please tell me spots nearby which are protected of wind and rain!“

„I received the best spot recommendation from members of a fishing club and of my friend Michael“

Interview 4

Arne, 36

User 4: Arne, 36

Gütersloh / 5 years fishing experience / Spin Fishing, Streetfishing / Sweetwater Lakes, Canal, River / Perch, Zander, Pike, Trouts

1 What is your favorite app. What do you like about it?

IngDiba Banking App. I did not use online banking before. The app simplifies transactions, by using the fingerprint ID. Further it provides a clearly structured overview about my fiancées. I get push messages every time something happens!

2 When was the last time you've checked the weather and which websites/apps do you use? Comparing to other devices why do you use...?

Yesterday I used the Apple Weather on my iPhone, to quickly check the weather. It's the only Weather App which was directly available. Normally I check the weather on my laptop. I use *Wetteronline* and *wetter.com*. in combination, because they provide a reliable weather forecast and I trust in overlapping informations. I also use both apps to check the weather before I go fishing, especially if weather conditions are not constant.

3 Do you use any other fishing app or digital devices for fishing? Why/why not?

When I lived in Hamburg I used the App *Nautide* to check the tide of the Elbe before I went fishing Zander. Here in NRW this app is not useful anymore. Living in Hamburg I also downloaded the App *Rivers*, but did not really use it. It provides a review of the changing water level, which is equally to the tide. But I definitely preferred *Nautide*, because they provide further weather data.

4 Which weather data do you think would be useful in a weather app made for anglers in general? Which Weather Data are important for you and why are they important for you?

As a person, who just goes fishing if the weather is nice, I always check the rain. From Wind, tide and water temperature I make conclusions about the fish activity. For example if the water temperature is quite high, I prefer fishing in deeper and cooler parts of the water. The weather conditions have a direct effect on my decision process of determining fishing spots, but not really on my bait tackle. I anyway prefer fishing with my soft baits.

5 Do you take your smartphone when you go fishing? Why? Why not?

Yes, I take it always with me. I like to have it with me in case of any emergency, to stay in contact with friends and family and of course to take pictures of my catch and share it with fishing friends!

User 4: Arne, 36

6 Imagine tomorrow evening is the only chance for you to go fishing! The weather forecast says its going to be quite windy and rainy, but you definitively want to go! How do you prepare yourself to enjoy this trip under theses circumstances?

I would choose a protected spot. In the Hafencity I know some protected spots, which allow a less stressful fishing. Here in NRW I do not know any! No chance!

7 How could a digital service help you with that?

Google Maps could help. I would look for a lake or river close to a bigger building or a bridge. When I'm driving around with bicycle or my car, I set a mark and save possible spots to google maps.
Using Google Maps it would be great to highlight lakes& rivers and fade out unnecessary parts for anglers.

8 Which fishing area / Water is still on your bucket list?...Now imagine a friend asks you to go to.... for a weekend trip. Its your job to determine the fishing spots and plan a route. How would you do that?

I'd love to go street fishing in big city like Amsterdam. When we arrive I would check out possible spots close our hotel on Google Maps or on Streetview. Bridges and narrowing rivers are interesting for me!

9 Tell me about your favorite fishing spot at the moment? What do you like about it and would you recommend it to others? Why? Why not??

One of my favorite spots is the canal in my garden, because its very close to my home! In general I love fishing in Groningen! The fish stock in Netherlands are much better than here in Germany. I would not tell my favorite home spot to strangers, especially if he has another value and idea of fishing (I like to catch and release). I'm scared that to many anglers occupy my spot. In consequence the fish will get used to baits and will be harder to trick. But I would tell good friends and responsible anglers!

10 After plenty unsuccessful fishing days at your spot you realize this spot is dead! Describe your strategy to find a new great spot!

I would use Google Earth or Google Maps to check out new possible spots. Further I would use the VISpas App. Its the official app from the Netherlands Fishing authority. It's a great app. It recognizes your location and provides a map showing where its officially allowed to go fishing.

User 4: Arne, 36

11 Imagine a person tells you about a new great spot, but it takes a bit more effort to go there! You're arguing with yourself if you should give it a try or stay at your well known spots nearby. Picture the person: Who or how needs the person to be or argue that you definitely give it a try? Tell me about anything that might convince you?

I just trust in Dietmar Isaisch (famous fishing personality)! ;)

I'm a skeptical person. Anglers like to talk a lot. The person must be sympathetic, friendly & trustworthy.

12 Would you use a weather data app for anglers? If yes, why? If not, which features or functions might convince you to use it?

No, I think I would not use it. Back in Hamburg I used *Nautide* to get informations about the tide and wind directions. But it further provides weather data like moon or air pressure and others, which are unnecessary for me. Too many data. It would have been great to automatically skip these information. Further they provide fish activity forecasts, which did not come true. To me that's the problem of fishing apps: they provide unreliable fish forecasts. I'm skeptical. No app or person can promise you to catch a fish today...Ok, maybe I would use your app, if it does not provide fish forecasts.

Summary: Arne, 36

Gütersloh / 5 years fishing experience / Spin Fishing, Streetfishing / Sweetwater
Lakes, Canal, River / Perch, Zander, Pike, Trouts

Behaviors & Attitude

Likes the push message feature of his banking app

Likes a clearly structured overview about his fiancées

Uses *Wetteronline* and *wetter.com* in combination before going fishing

Trusts in overlapping informations

Checks the longterm Weather Forecast if the conditions seem not to be constant

Uses Apple Weather for a quick check

Thinks Apple Weather is not reliable

Uses Nautide to check the tide for fishing Zander

Hard to get reliable warnings from upcoming thunderstorms

Likes about Nautide that it provides further weather data

Prefers Nautide comparing to Rivers

Used Rivers to check the review of the water level

Prefers fishing in deeper and cooler parts of the water if water temperature is high.

Likes to take his phone to the water

Likes to take pictures of his catch

Thinks it's hard to find protected spots in rural areas

Saves possible spots to Google Maps

Likes to catch & release

Uses VISpas (Netherlands official fishing app) to check where fishing is allowed

Uses Google Maps to look for protected spots next to a building or bridge

(Streetfishing) Google Maps&Streetview to look for bridges and narrowing parts of a river

Prefers fishing with *Gummifische*. Does not need any recommendation.

Summary: Arne, 36

Gütersloh / 5 years fishing experience / Spin Fishing, Streetfishing / Sweetwater
Lakes, Canal, River / Perch, Zander, Pike, Trouts

Needs & Goals

Fishing in Hamburg he needs to check the tide

Needs to check the rain, if he goes fishing or when

Needs to check the wind conditions to make conclusions about the fish activity

Needs to check the water temperature to make conclusions about the fish activity

Needs to check the tide to make conclusions about the fish activity

Needs a protected spot if it's rainy & windy

Needs informations about the water level & current to adjust his tackle.

(Unknown Water) Needs a depth chart of a lake

(Unknown Water) Needs spot recommendations for fishing from the boat

Friction Points

Hates fishing in the rain

Does not like irresponsible anglers occupying his spot

Does not like fish activity forecasts, are too generic

Does not like too many weather data (Just the ones which are important for him)

Quotes

„Weather conditions have a direct effect on my decision process of determining fishing spot“

“Using Google Maps it would be great to highlight lakes & rivers and fade out unnecessary parts for anglers.”

„The Fish Stock in the Netherlands are better than in Germany“

VISPas is great. It recognizes your location and provides a map showing where its officially allowed to go fishing.”

„I just trust in recommendations from Dietmar Isaich (famous fishing personality)! ;)“

„I would have used Nautide more often if I could have selected which data are important for me“

Screening Threads of Barschalarm

Den Rückblick würde ich mir auch für deutsche Gewässer wünschen, ja. Häufig sind konstante Wetterbedingungen besser als ständig schwankende. Beim Lachs ist es eher andersrum, hier bringt der Wetterumschwung (v.a. von warm/sonnig zu norddeutsche/ungemütlich 😞) häufig den Erfolg. In langen, warmen, Perioden sind es häufig auch wenige Grad Lufttemperatur, die den Unterschied machen können. Finde den Ansatz daher auch super keinen Beißindex oder sowas einzubringen, sondern den Nutzer selber entscheiden zu lassen, welche Schlüsse er zieht.

Huhu,
ja nichts zu danken. Ich finde es ja super, dass du so ein Projekt ins Leben rufen willst. Aber ich gebe dir da recht, einen Beißindex, finde ich persönlich eher suboptimal, da die meisten Modelle eher generelle, oberflächliche Datenanalysen sind, die nicht auf jedes Gewässer gleich projiziert werden können. Was noch irgendwie interessant wäre, wenn man eine Art persönliches Fangbuch in dieses Programm integrieren könnte. (Nur mal so als kleine Anregung 😊)

Wenn du weitere Informationen benötigst oder einen Tester für den Prototypen, stehe ich natürlich auch gerne weiter zur Verfügung.
Ich meine es wäre ja praktisch, wenn man sein Netzwerk im besten Falle über ganz Deutschland verteilen kann, um so flächendeckend für verschiedene Regionen ein Ergebnis zu bekommen.

Liebe Grüße,
Mario

Hi Kathrin,

habe deine beiden Beiträge zum Thema Wetterapp gelesen und finde das Projekt ziemlich spannend - ich bin auch einer derjenigen, der seine Infos aus allen möglichen Apps zusammensucht. Am meisten Stress habe ich, wenn ich Touren zum Lachsangeln nach Dänemark plane - sind sicher 5 verschiedene Homepages/Apps, die ich da vorher durchsuche. Was mir ganz häufig fehlt: Ein Wetterrückblick. Häufig ist es gar nicht so sehr das aktuelle Wetter, was mich interessiert, sondern die Entwicklung der letzten Tage.

Kennst du die Havørred.com app? Da haben sich ein paar Dänen ganz ähnliche Gedanken gemacht und eine recht coole App für die dänische Küstenfischerei entwickelt.

Steckt euer Projekt noch in der Planungsphase, oder gibt es schon erste Programmentwürfe?

Beste Grüße aus Schleswig
Fynn

Hey,
das Interesse ist sogar ziemlich groß, da ich jetzt im Moment mehrere Wetter-Apps nutzen muss um verlässliche Wetterdaten zu bekommen.
Ich komme vom Niederrhein/NRW nahe der NL-Grenze und bin somit auch viel in Holland und am Rhein in NRW unterwegs.
Da ich auch gerne mal weitere Strecken auf mich nehme bzw. auch oft vom Boot fische, wäre eine einzelne App aus der man alle Wetterdaten verlässlich ablesen kann, eine wahnsinnig tolle Erleichterung.
Zielfische sind Hecht, Zander, Barsch

Spreading my survey in the online meeting place Barschalarm I received further Feedback and Input:

- Angler combine several Weather Apps to get a reliable weather forecast.
- Fish activity forecasts using the Beißindex / Sonular Theory are superficial & not reliable
- Weather Review would be helpful
- Personal Logbook would be interesting
- Further Competitors should be analyzed: Nautide, VISpas, Havorred and Navionics



User 5: Barschalarm

Findings from screening threads about Weather on online meeting places like Barschalarm & Anglerboard

Behaviors & Attitude

Uses several resources to check the weather, because they all have different focus

Thinks the Beissindex is superficial

Thinks the Beissindex is just Mumbo Jumbo

Thinks the Beissindex can not come true for every water

Thinks the every fish specie prefers different times during a day to eat

Thinks every angler has to go through a longterm process of experiencing his water

Take notes about weather conditions if he did not catch anything

Goes fishing if he has time to fish.

Uses Agrar Wetter for reliable Weather forecast

Uses DWD for a reliable warning from thunderstorms

Likes the informations structure of Windfinder

Likes that Windfinder obtains information from weather stations nearby

Uses Windfinder to check the waves (height, periods in sec, direction)

Days after Full Moon are the best to catch Predators

Thinks a constant air pressure for some days higher the chance to catch a Zander

User 5: Barschalarm

Findings from screening threads about Weather on online meeting places like Barschalarm & Anglerboard

Needs & Goals

Needs a Weather Review to check, if weather is constant for fishing Zander

Needs a Weather Review to check, if weather is fickle for fishing Salmon

Needs a reliable Weather Forecast to plan his fishing trips to the Netherlands

Pays a lot of attention to informations about the air pressure

Needs sunny weather to fish for perch

Needs cloudy weather for fishing

Friction Points

Doesn't like the Beissindex

Doesn't like fishing apps

Quotes

„Just one App providing all data I need would be a relief“

„A feature for a personal logbook would be interesting“

3. Affinity Mapping

Reliability of forecasts

Always uses several sources and compare them.

Trusts in overlapping informations from all his resources

Fishing from the Belly Boat he needs a reliable and exact warning from thunderstorms.

Hates unreliable fish activity prognosis.

„Wetteronline has a simple structure and provides the most reliable weather forecast.“

Thinks *Wetteronline* provides a reliable weather forecast

Needs a reliable Weather forecast

Needs a reliable and exact warning from thunderstorms.

Does not like unreliable fish activity prognosis.

For a reliable forecast he uses *Wetteronline* and *wetter.com* in combination before going fishing

Trusts in overlapping informations

Thinks Apple Weather is not reliable

Hard to get reliable warnings from upcoming thunder storms - necessary!

Does not like fish activity forecasts, are too generic

Uses several resources to check the weather, because they all have different focus & expertise

Thinks the *Beissindex* is superficial

Thinks the *Beissindex* is just Mumbo Jumbo

Thinks the *Beissindex* can not come true for every water

Needs a reliable Weather Forecast to plan his fishing trips to the Netherlands

Thinks the every fish specie prefers different times during a day to eat

Goes fishing if he hast time to fish.

Uses *Agrar Wetter* for reliable Weather forecast

Uses DWD for a reliable warning from thunderstorms

Likes that Windfinder obtains information from weather stations nearby

Weather Data// Structure

„I'd love to have explanations like what a higher air pressure means!“

Needs a detailed weather forecast for every part of the day to determine the best time to fish

Needs a weather review to plan a fishing trip to the Netherlands (Zander fishing)

Needs a 7 days longterm prognosis to plan a fishing trip to the Netherlands (Zander fishing)

„Wetteronline has a simple structure.

Needs a weather review.

Needs a rain review to check if his little canal turned into a torrent river

Checks the longterm Weather Forecast if the conditions seem not to be constant

Does not like to many weather data(Just the ones which are important for him

„I would have used *Nautide* more often if I could have selected which data are important for me“

Likes the information structure of Windfinder

Needs a Weather Review to check, if weather is constant for fishing Zander

Needs a Weather Review to check, if weather is fickle for fishing Salmon

Weather Data // Rain

Needs a protected fishing spot, if its windy & rainy outside.

Needs a raincoat, if its windy & rainy outside.

„A wind and rain map would be great.“

Needs a raincoat, if its windy & rainy outside.

„If I could ask the App please tell me spots nearby which are protected of wind and rain!“

Checks the rain forecast.

Wants to know which outdoor clothes he should to wear for fishing.

Uses the *Regnradar* to check if its going to rain

Wants to know which outdoor clothes he should to wear for fishing.

Needs a protected fishing spot, if its windy & rainy outside.

Needs a spot close to a parking place, if its rainy & windy

Needs a rain review to check if his little canal turned into a torrent river

Needs to check the rain, if he goes fishing or when

Needs a protected fishing spot, if its windy & rainy outside.

Hates fishing in the rain

18 of 29 Participants check the rain forecast

Weather Data // Wind

Needs a protected fishing spot, if its windy & rainy outside.

Wind direction to check if the spot is really protected from rain.

„A wind and rain map would be great.“

Needs a protected fishing spot, if its windy & rainy outside.

Wants to know which outdoor clothes he should wear for fishing.

„If I could ask the App please tell me spots nearby which are protected of wind and rain!“

Does not like to fish under trees, if its too windy

Wants to know which outdoor clothes he should wear for fishing.

Needs to check the wind conditions to make conclusions about the fish activity

Needs a protected fishing spot, if its windy & rainy outside.

Havorred provides a water temperature map for fishing on the sea

21 of 29 check the wind conditions

Weather Data

//UV-Index

Thinks if the UV Index is high, the fish prefer protected spots in the shadow.

Does not want to sunburn.

//Sun / Clouds

Wants to know which outdoor clothes he should wear for fishing.

Wants to know which outdoor clothes he should wear for fishing.

Needs sunny weather to fish for perch

Needs cloudy weather for fishing

22 of 29 Participants check if its sunny or cloudy

//Air Pressure

Thinks a constant air pressure for some days higher the chance to catch a Zander

12 of 29 Participants check the air pressure

// High pressure & Low Pressure Movements

1 of 29 Participants goes fishing if a Low pressure area is coming

Weather Data

//Tide

Needs to check the Tide to evaluate spot and time for fishing Zander in Hamburg

Uses Nautide to check the tide for fishing Zander

Needs to check the tide to make conclusions about the fish activity

9 of 29 Participants check the tide

//Water Level

Needs informations about the waterlevel & current to adjust his tackle.

Used *Rivers* to check the review of the water level (- equally to tide)

Needs informations about the water level & current to adjust his tackle.

1 of 29 Participants checks the Water Level

//Water Temperature

Prefers fishing in deeper and cooler parts of the water if water temperature is high.

Needs to check the water temperature to make conclusions about the fish activity

Havorred provides a water temperature map for fishing on the sea

14 of 29 Participants check the water temperature

//Temperature

Wants to know which outdoor clothes he should to wear for fishing.

Wants to know which outdoor clothes he should to wear for fishing.

Weather Data

//Current

Needs informations about the waterlevel & current to adjust his tackle.

1 of 29 Participants checks the current

//Lunar Calendar

Days after Full Moon are the best to catch Predators

1 of 29 Participants checks the Lunar Calendar

//Water Suspension

Need Informations about Water Suspensions, to adjust his bait tackle.

// Waves(Sea)

Uses Windfinder to check the waves (heigh, periods in sec, direction)

//Salinity

Havorred provides a salinity map for fishing on the sea

// Polination

As an allergic person he needs informations about pollination.

Spot Search // General

„A spot search feature would be great.“

„Something like spot suggestions nearby would be great.“

At the water he looks for spots who are easy to access.

„A spot search feature would be great.“

„If I could ask the App please tell me spots nearby which are protected of wind and rain!“

Likes to check if other anglers have already succeeded in his spot.

Thinks a good spot is just where you catch a lot of fish

(Unknown Water) explores new possible spots by foot

„A great feature would be to ask the App for spots nearby which are protected of wind and rain!“

It's hard to find protected spots in rural areas

2 of 29 Participants use Guiding Books

4 of 29 Participants explore Spots by walking or cycling around

Spot Search // Using Depth Charts

Looks for ditches, hills or other interesting structures on depth charts

Would ask for a depth chart in town halls

(Unknown Water) Needs a depth chart of a lake

1 from 29 participants use Navionics

Create an own depth chart of huge unknown lake would take too long.

Uses *Fish Deeper*, an app for his mobile sonar

2 from 29 Participants screen lakes with an echolot

Created his own depth chart of his two favorite lakes

Needs to check the ground structure of the water to see where the fish might hide.

Thinks Navionics is too expensive (60€)

(Unknown Water) Needs a depth chart of a lake

Would ask for a depth chart in fishing shops

Spot Search // Using Maps

The streetview allows a detailed preview of his potential spot

For a new similar Spot, he would first check out the river branches.

Saves possible spots to Google Maps

16 of 29 Participants use Google Maps

Uses Google Earth to spot bridges .

Needs his phone to get orientation

Uses VISpas (Netherlands official fishing app) to check where fishing is allowed

1 of 29 Participants uses Google Earth

Uses Google Earth to spot narrowing parts of a river.

“Using Google Maps it would be great to highlight lakes& rivers and fade out unnecessary parts for anglers.”

Uses Google Maps to look for protected spots next to a building or bridge

Uses a list of saved & collected spots on google maps.

„VISPas is great. It recognizes your location and provides a map showing where its officially allowed to go fishing.”

(Streetfishing) Google Maps&Streetview to look for bridges and narrowing parts of a river

Spot Search // Recommendations

Trusts in recommendations from friends.

„Fishing people like to exaggerate“

Doesn't like anglers fishing at his favorite spot

Needs to know the person to evaluate how reliable a spot recommendation might be.

Wants to keep his favorite spot secret, because other anglers might occupy it

Takes any spot recommendation in areas where he never fished before.

Needs to know a person to judge how reliable a spot recommendation might be. (Known waters)

Doesn't like anglers fishing at his favorite spot

Uses Google to look for spot recommendations

Searches through online meeting places for spot recommendations

(Unknown Water) Asks fishing club members for recommendations.

(Unknown Lake) Needs spot recommendations for fishing from the boat

(Unknown Lake) Needs spot recommendations for fishing from the shore

„I was so thankful for any advice. So why should I keep my secrets(spot).“

„I received the best spot recommendation from members of a fishing club and of my friend Michael“

(Unknown Lake) Needs spot recommendations for fishing from the boat

(Unknown Lake) Needs spot recommendations for fishing from the shore

Would not recommend his spot because, he doesn't irresponsible anglers occupying his spot

„I just trust in recommendations from Dietmar Isaisch (famous fishing personality)! ;)“

16 of 29 Participants find new spots due to recommendations

Additional Features

//Sharing Pictures

Likes to take pictures of his catch & share them.

Likes to take pictures of his catch

Likes to take pictures of his catch

//Bait & Tackle Recommendation

Wishes recommendations which colors his bait should have today.

Prefers fishing with *Gummifische*. Does not need any recommendation.

Suits his bait tackle to weather conditions

Asks the shop assistance in a tackle shop for tackle recommendations

Needs informations about the water level & current to adjust his tackle.

//Permissions

(Unknown Water) Checks if a fishing license is necessary

(Unknown Water) Who is the tenant?

Would ask a fishing shop assistant which fishing license is necessary?

//Logbook

Thinks every angler has to go through a longterm process of experiencing his water

„A feature for a personal logbook would be interesting“

Take notes about weather conditions if he did not catch anything

//Book a Guiding

Would book a professional guide for a deep sea fishing trip

„VISPas is great. It recognizes your location and provides a map showing where its officially allowed to go fishing.“

Competitors

Uses DWD, Wetteronline & Google Weather to check the forecast.

Didn't like the app Fishing&Hunting.

„Wetteronline has a simple structure and provides the most reliable weather forecast.“

Follows popular fishing personalities from and around Munich on Instagram

Uses *Wetteronline* to check the weather forecast

Uses the *Regnradar*.

Uses the Social Media App *AlleAngeln*

Uses *Fish Deeper*, an app for his mobile sonar

For a reliable forecast he uses *Wetteronline* and *wetter.com* in combination before going fishing

Likes about *Nautide* that it provides further weather data (not just tide)

Used *Rivers* to check the review of the water level

Uses *Agrar Wetter* for reliable Weather forecast

Uses DWD for a reliable warning from thunderstorms

Likes that Windfinder obtains information from weather stations nearby

Havorred, App for fishing on/at the danish sea

preweather.com

4. User Insights

User Insights

Reliability of a Weather Forecast

- Provide Weather Data on the basis of a selected Weather Station - Manage Weather Station Feature
- Compare Weather Forecast with Wetteronline, Agrarwetter, DWD & Windfinder (for Germany) - showing percentage of similar information
- No *Beissindex*

Longterm Forecast to help planning in advance

- Provide a 10 Days Longterm Weather Forecast
- Sun/Clouds, Rain, Wind, Air Pressure, Water, Temperature, Air Temperature, Waves
- Communicate that this prognosis isn't that reliable comparing to forecast for two days

Determine the best time to fish

- Provide a detailed Weather Forecast for two/three days
- Provide how Weather Conditions develop during the day (morning, midday, evening, hours)
- Sun/Clouds, Rain, Wind, Air Pressure, Water, Temperature, Air Temperature, Waves

Reliable warnings of thunderstorms

- Send push messages if a thunderstorm is close to User Location
- Providing a map showing possible thunderstorms and how they move - Combination to the Rainmap
- Compare Weather Forecast with Wetteronline, Agrarwetter, DWD & Windfinder (for Germany) - showing percentage of similar information

Checking the constancy of the Weather Conditions

- Provide a 7-Days Weather Review containing all important Weather Data
- Sun/Clouds, Rain, Air Pressure, Water Temperature, Air Temperature, Waves
- Map of High Pressure Areas & Low Pressure Areas

Making decisions considering rain: Fishing Yes or No? Time & Spot & Which Clothes?

- Rain Map similar to the *Regenradar*
- Protected Spot suggestions

Lots of overwhelming Weather Data

- Settings: User can choose which Weather Data are interesting for him
- Onboarding: Asking the User where and what is he angling, Make Interface Suggestions

Making decisions considering Wind: Fishing Yes or No? Time & Spot & Which Clothes?

- Rain Map similar to the *Windfinder*
- Protected Spot suggestions
- Layer System: Combine with Rain Map

User Insights

Making decisions considering Tide: Time & Spot

- Providing how the tide is developing (24/7) close to the chosen Weather Station
- 10 days forecast
- Spots in/at water changing due to the tide: Showing current status & development

Using Depth Charts to look for possible Spots

- User can save a depth chart
- Can mark spots on the depth chart
- Corporation with local fishing shops & fishing clubs & *Navionics*
- User can buy a depth chart from local fishing shops & fishing clubs & *Navionics*
- User can sell his depth chart to other Users

Using Google Maps to look for possible Spots

- Provide Map - Google Maps & Streetview
- Highlight the River, Canals, Lakes, Sea - blue color
- Able to save spots
- Able to layer the Wind and Rain Conditions
- Mark Water User can fish without permission, mark Waters who belong to a fishing Club (similar http://www.elbetreff.de/elbe/Angeln/hh_freie/index.htm, VISPas)

Reliability of Spot Recommendations

- Possible to share Spots with friends
- Advertising: Ask fishing clubs, Fishing Shops, Fishing Guides to provide recommendations
- Spot Recommendations from famous fishing personalities