

UNDERWATER PHOTOGRAPHY WORKSHOP

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ANY QUESTIONS SHOUT !



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UNDERWATER PHOTOGRAPHY WORKSHOP

- ENVIRONMENT
- TECHY BIT
- BASIC TIPS
- TYPES OF SHOT
- COMPOSITION
- EQUIPMENT



UAE - SLR

UNDERWATER PHOTOGRAPHY WORKSHOP

- **ENVIRONMENT FIRST**

- DO NO HARM, DO NOT TOUCH
- LEAVE NOTHING BUT BUBBLES, TAKE NOTHING BUT PHOTOS.
- THE REEF IS VERY FRAGILE AND NEED TO PROTECT IT.
- IF YOU CAN'T GET THE SHOT, THEN DON'T



UAE - SLR

UNDERWATER PHOTOGRAPHY WORKSHOP

APERTURE

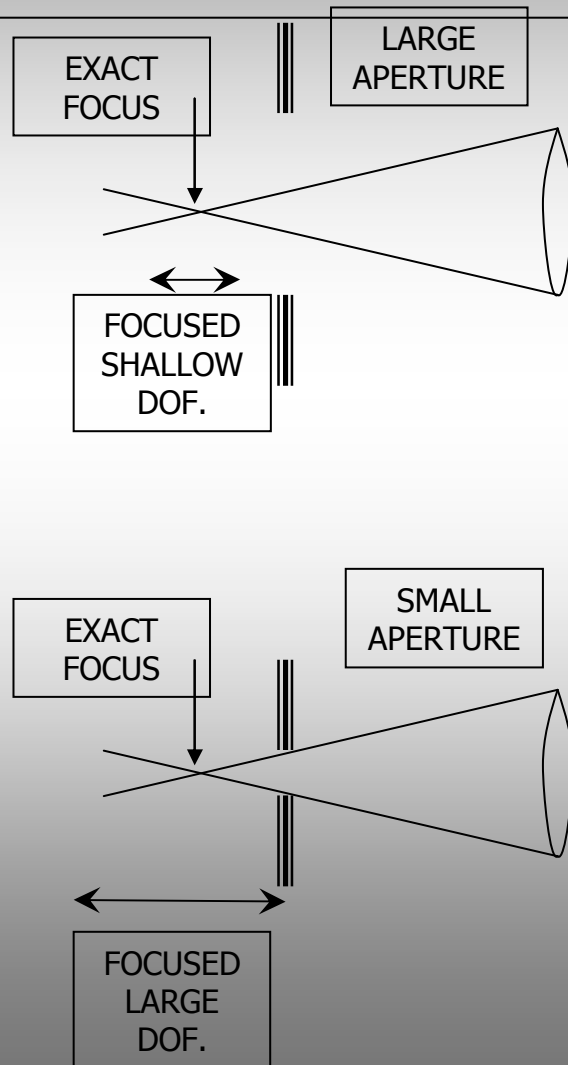


SHUTTER SPEED

- **TECHY BIT**
 - APERTURE
 - SHUTTER SPEED
 - ISO RATING
- **BALANCE SHUTTER SPEED, APERTURE AND ISO FOR CORRECT EXPOSURE.**

ITS ALL ABOUT LIGHT

UNDERWATER PHOTOGRAPHY WORKSHOP



● APERTURE

- OPENING BEFORE THE SHUTTER THAT ALSO CONTROLS AMOUNT OF LIGHT.
- THIS CAUSES THE DEPTH OF FIELD.
- HAVE TO BALANCE SHUTTER SPEED AND APERTURE FOR GOOD DOF.
- $f4$ = LARGE APERTURE, LARGE HOLE
- $f16$ = SMALL APERTURE, SMALL HOLE
- $f4$ IS TWICE THE SIZE OF $f5.6$

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Fast Shutter
Small Aperture
Deep DOF
Low Light



Correct Shutter
Correct Aperture
Okay DOF
Correct Light

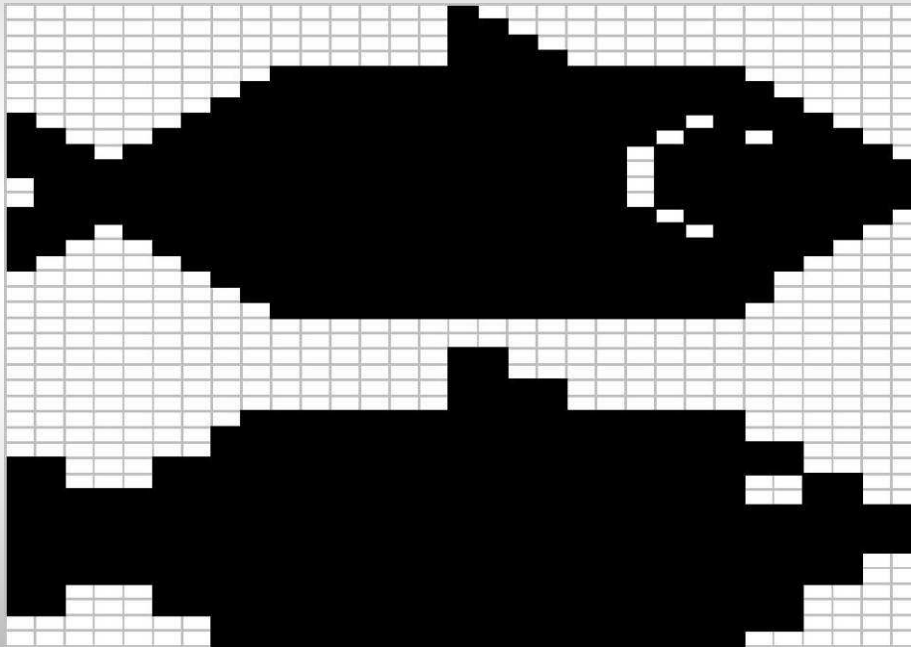


Slow Shutter
Large Aperture
Shallow DOF
Excess Light

● SHUTTER SPEED

- THE LONGER THE SHUTTER OPEN THE MORE LIGHT.
- LONGER SHUTTER OPEN THE MORE SHAKE / BLUR
- A PROBLEM IN WATER DUE TO MOVEMENT A PROBLEM.
- FLASH WILL NOT SYNCHRONIZE OVER 1/125.
- TOP SIDE RULE IS 1/FOCAL LENGTH
 - 100mm lens = 1/100sec
- IN WATER TYPICAL 1/200 TO 1/60

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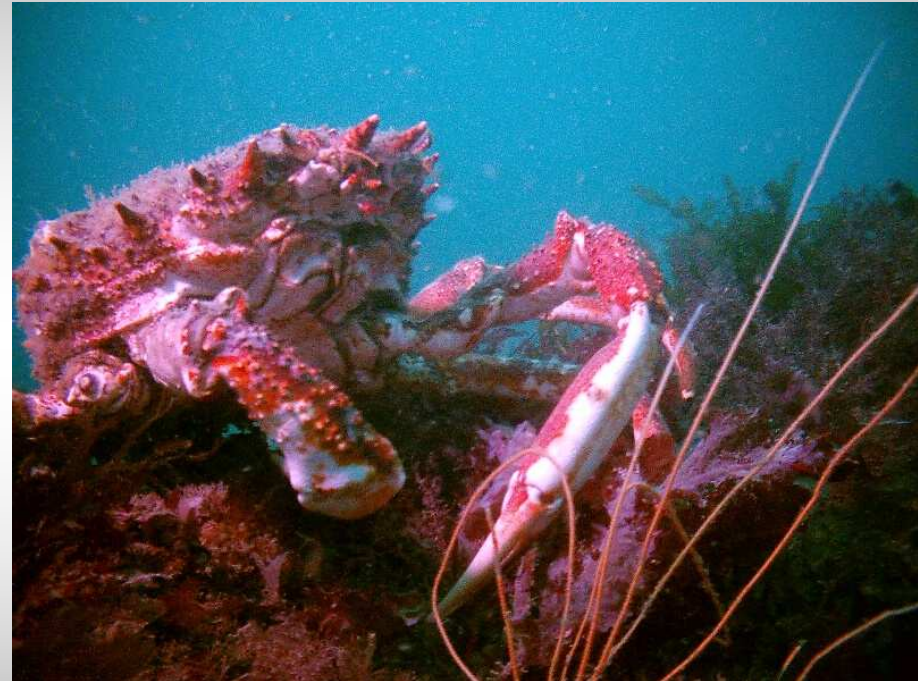


- ISO RATING

- THIS COMES FROM CHEMICAL FILMS BUT SAME FOR DIGITAL
- LOWER THE ISO RATING THE MORE LIGHT NEEDED
- HIGHER THE ISO LESS LIGHT BUT LESS RESOLUTION

UNDERWATER PHOTOGRAPHY WORKSHOP

- BASIC TIPS
 - GET CLOSE
 - GET CLOSE
 - REMEMBER LIGHT
 - SHOOT UP
 - BUOYANCY
 - COMPOSITION



UK – POINT AND SHOOT

UNDERWATER PHOTOGRAPHY WORKSHOP

- **GET CLOSE**
 - **KEY CONCEPT**
 - DISTANCE TO SUBJECT = WATER AND PARTICLES BETWEEN YOU AND SUBJECT
 - THE MORE DISTANCE THE MORE DEBRIS THE MORE SNOW



RED SEA – POINT AND SHOOT

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- **REMEMBER LIGHT**
 - LIGHT = COLOR
 - WELL LIT WITH NO PARTICLES WILL GIVE GOOD RESULTS
 - USE STROBE OR DIVE LIGHT
 - USE SHUTTER, APERTURE AND ISO SETTING



RED SEA – POINT AND SHOOT

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- **SHOOT UP**

- HELP FROM NATURAL LIGHT
- THE MORE LIGHT, THE BETTER, THE COLORS, THE BETTER PHOTO
- SUN BURST IS NICE CAN BE DIFFICULT TO CONTROL



RED SEA – POINT AND SHOOT

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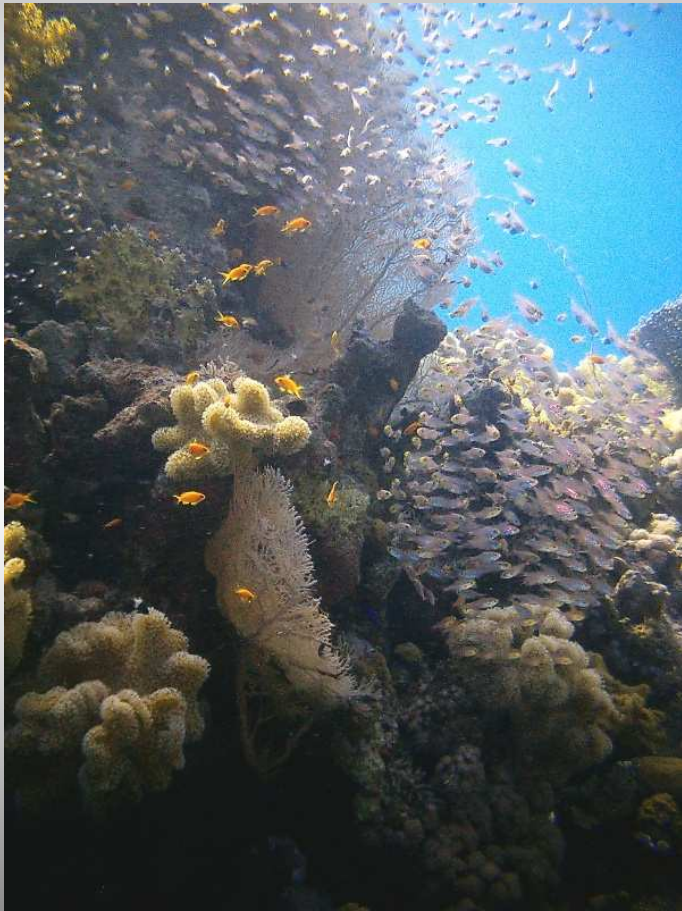
- **BUOYANCY**

- SLOW SHUTTER = MORE LIGHT = CAMERA SHAKE
- EVERYTHING IS MOVING UNDER WATER SO YOU NEED PERFECT BUOYANCY
- DON'T STIR SILT, REMEMBER CURRENT
- YOU CAN KNEEL / LEAN BUT BE AWARE OF BOTTOM, DO **NO** HARM
- TAKE NOTHING BUT PHOTOGRAPHS, LEAVE NOTHING BUT BUBBLES



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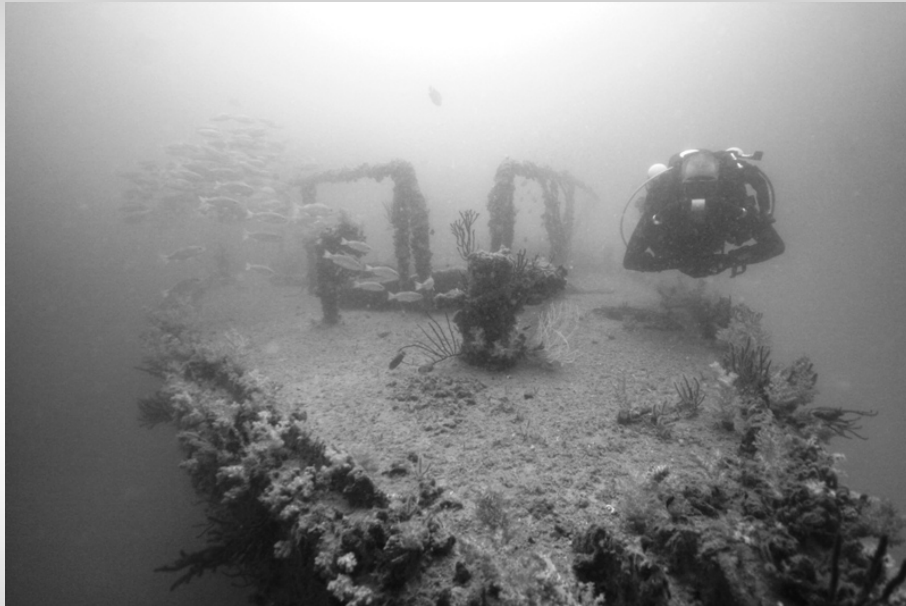
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RED SEA – POINT & SHOOT

- TYPES OF SHOT
 - WIDE ANGLE
 - CLOSE UP (MACRO)
 - MID RANGE (FISH AND DIVERS)

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- **WIDE ANGLE**
 - WRECKS AND PANORAMAS
 - GET CLOSE
 - NATURAL LIGHT
 - HIGH ISO, SLOWER SHUTTER
 - BLACK AND WHITE
 - GOOD DEPTH OF FIELD
 - CAN ALSO USE CLOSE UP WIDE ANGLE WITH NEAR AND FAR SUBJECT AS GOOD DOF.
 - STRAIGHT LINES CAN BEND DUE TO LENS (SPHERICAL ABERRATION)
 - FLAT PORTS CAN GIVE 'SOFT' CORNERS, USE SMALLER APERTURE TO SHARPEN

TYPICALLY 8-20MM LENS, 8" DOME PORT
1/60s F4-5

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- **CLOSE UP**
 - AKA "MACRO"
 - USE MACRO SETTING ON CAMERA
 - CAN USE ZOOM TO GET WORKING DISTANCE AS MINIMAL LENS TO SUBJECT DISTANCE
 - STROBE OR DIVE LIGHT
 - GOOD FOR STILL LIFE, NUDI, CORAL ETC.
 - SHALLOW DOF.
 - FLAT PORT USES WATER REFRACTION TO INCREASE MAGNIFICATION

TYPICALLY 60-100MM MACRO 1:2 – 2:1
FLAT PORT & EXTENSION RINGS
1/200 F10

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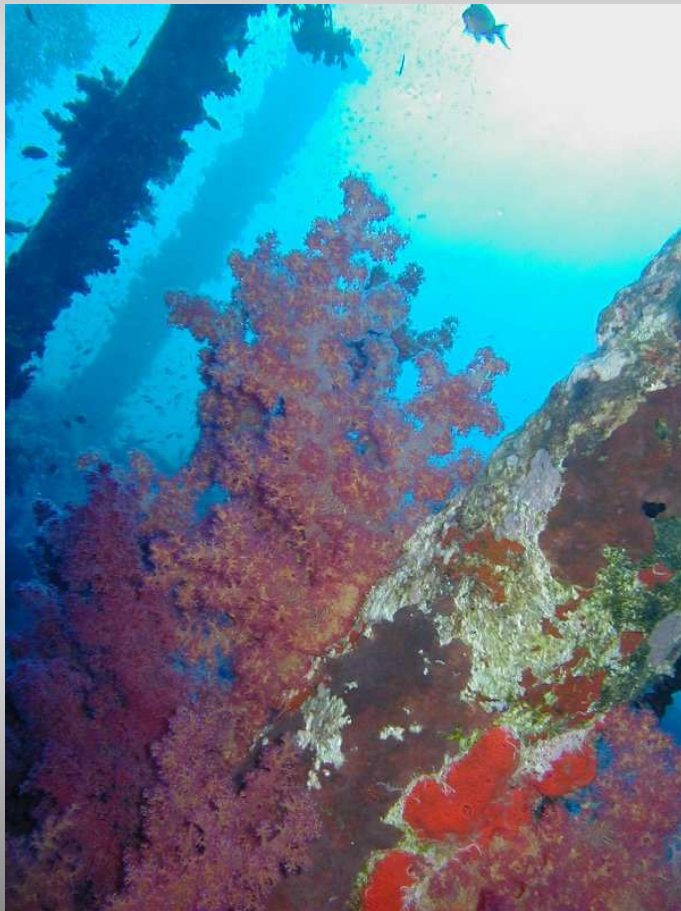
UAE - SLR

- **MID RANGE**

- TYPICAL FOR FISH AND DIVERS
- REMEMBER LENS TO SUBJECT DISTANCE
- SPEED OF MOTION
- NEED LIGHT UNLESS SHALLOW

TYPICALLY 20-55MM
DOME OR FLAT PORT
1/125 F4-5

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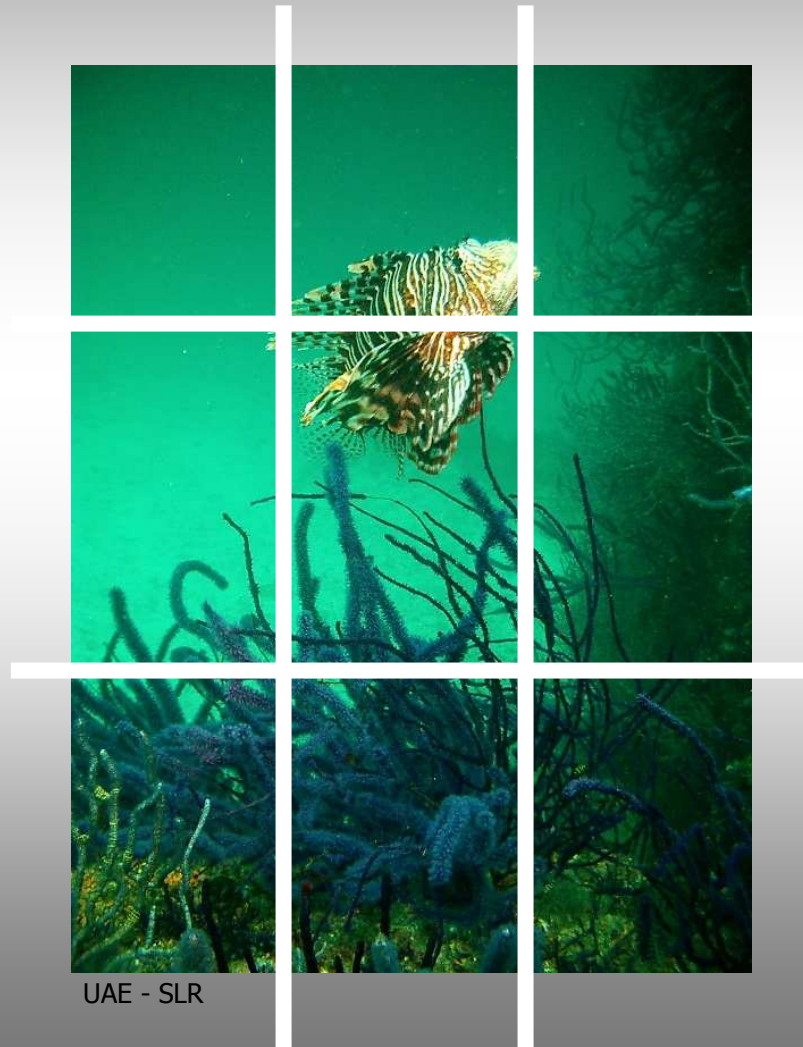


RED SEA – POINT AND SHOOT

- **COMPOSITION TIPS**
 - THIRDS
 - DIAGONALS
 - THE BOTTOM
 - ROOM FOR SUBJECT TO MOVE
 - NEGATIVE SPACE
 - PHOTO SHOP

 - YOU CAN ALWAYS BREAK THE RULES

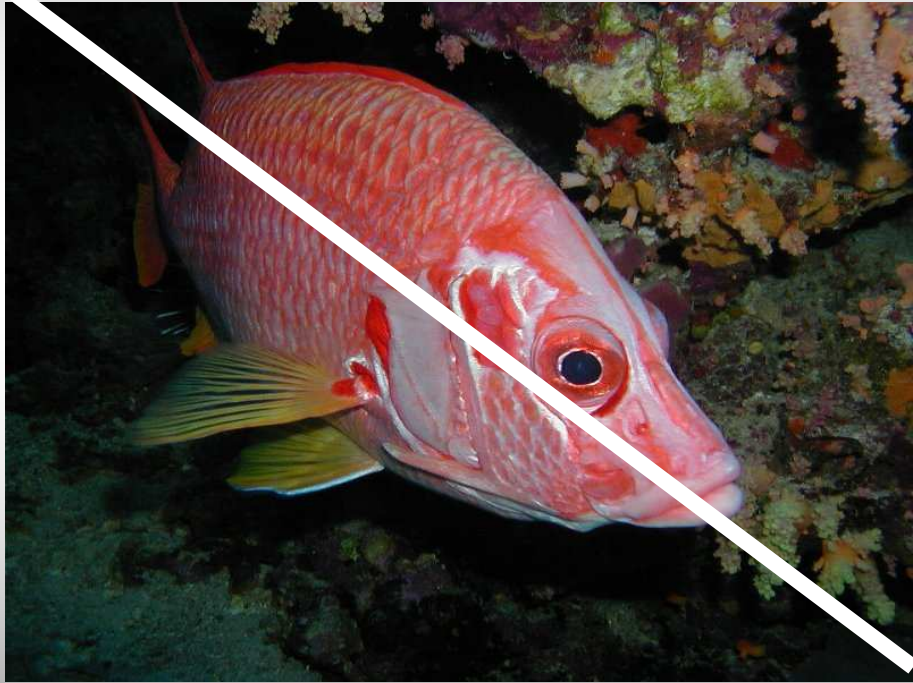
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- **RULE OF THIRDS**
 - KEY POINTS OF PHOTOS ON THIRDS
 - FISH / HEADS / EYES
 - VERTICAL OR HORIZONTAL

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RED SEA – POINT AND SHOOT

- **DIAGONALS**

- MUCH MORE PLEASING AND EASIER THAN HORIZONTAL / VERTICAL
- LEADING LINES
- HELPS COVER BENT LINES FROM VERY WIDE LENS

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- **ROOM TO MOVE**

- DON'T "RESTRICT" THE SUBJECT.
- ALLOW AS IF THE SUBJECT IS ABOUT TO MOVE OFF.
- DON'T FRAME / CROP TIGHT ON THE DIRECTION OF TRAVEL.
- WORKS WITH RULE OF THIRDS

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- **NEGATIVE SPACE**
 - CONTROL THE BACKGROUND TO ONLY SHOW THE SUBJECT.
 - USE SMALL APERTURE TO RESTRICT THE AMOUNT OF NATURAL LIGHT
 - FLASH ONLY LIGHTS THE SUBJECT

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RED SEA – POINT AND SHOOT

- **THE BOTTOM**

- MAKE SURE THERE IS CLEAR WATER IN THE SHOT.
- PEOPLE WANT TO KNOW IT'S UNDERWATER.
- FISH ARE CAMOUFLAGED DON'T HIDE THE SUBJECT IN THE BOTTOM

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UAE – SLR CROPPED



- **PHOTOSHOP**

- ETHICS DEBATABLE
- PHOTOSHOP CAN ENHANCE AND RE-FRAME PHOTOS
- A GOOD SHOT IS A GOOD SHOT, CAN ONLY MAKE A BAD SHOT AVERAGE.
- CAN HELP CORRECT COLOR BALANCE
- FOR DIVERS CAN USE TO ERASE BUBBLES

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DIR THE PHOTOSHOP WAY

EVER SEEN PHOTOS IN "DIVER" WHERE THEY HAVE NO S.P.G. ETC ? EDITORS AND PHOTOSHOP IS WHY.



UNDERWATER PHOTOGRAPHY WORKSHOP

● **EQUIPMENT**

- COMPACT HOUSED CAMERAS AKA "POINT AND SHOOT"
- D-SLR / SLR
- EXTRA LIGHT
- MAINTENANCE
- "O" RINGS



UNDERWATER PHOTOGRAPHY WORKSHOP

- **POINT AND SHOOT**

- COMPACT HOUSED CAMERAS
- LIGHT RESTRICTED
- FIXED LENS 25-55MM
- HARDER TO SET SHUTTER AND APERTURE
- SLOW SHUTTER REACTION
- SMALL AND HANDY
- "CHEAP"
- USE TIPS TO MAXIMIZE RESULTS



UNDERWATER PHOTOGRAPHY WORKSHOP

- **D-SLR**

- EASY CONTROL OF SHUTTER AND APERTURE
- RANGE OF LENSES
- USE OF STROBES
- EXPENSIVE
- LARGE
- MANY COMPONENTS



VIDEO CLIP – SELF PORTRAITS IMPOSSIBLE

UNDERWATER PHOTOGRAPHY WORKSHOP

Dismantled



Housing



Camera Body & Lens



Ports



Storbes



Assembled



UNDERWATER PHOTOGRAPHY WORKSHOP

- **EXTRA LIGHT**
 - NATURAL LIGHT ONLY ABOUT -5M
 - ADD LIGHT TO BRING COLOR
 - STROBES AKA "FLASH"
 - ALSO USE A DIVE LIGHT
 - POSITIONING THE SOURCE
 - WHITE BALANCE & MAGIC FILTERS

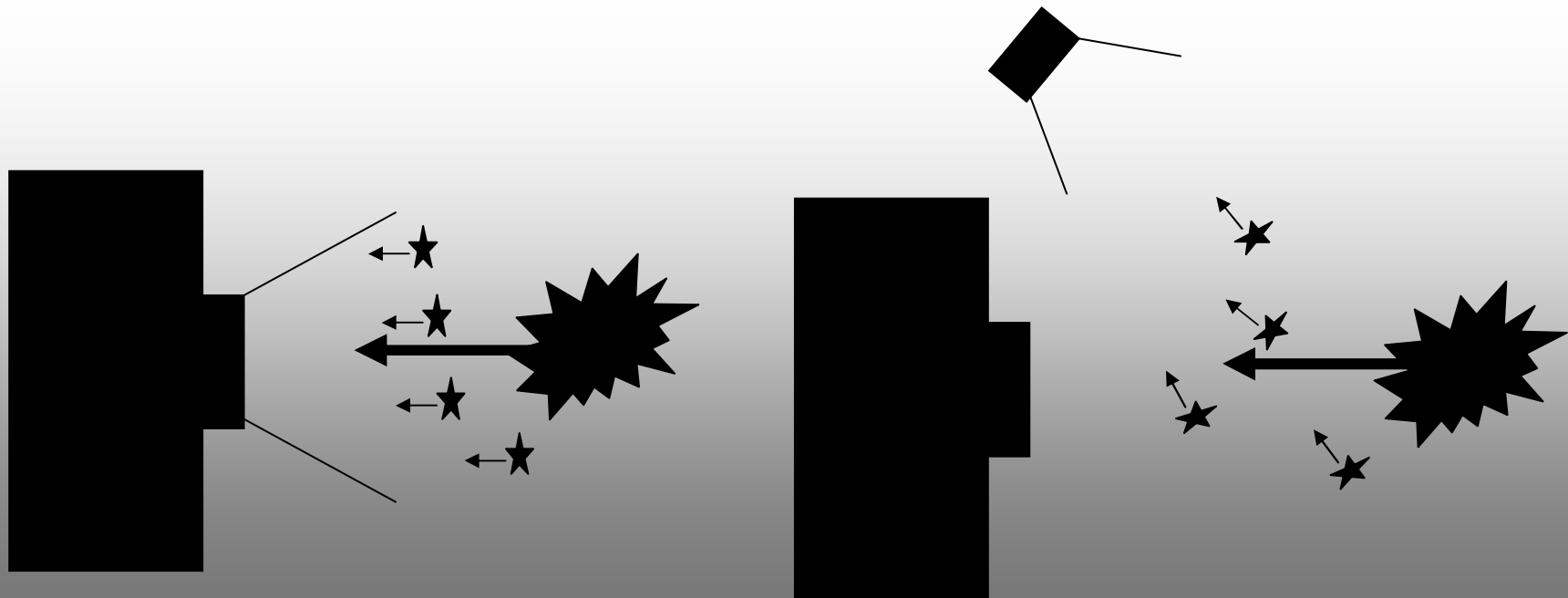


UAE – POINT AND SHOOT

UNDERWATER PHOTOGRAPHY WORKSHOP

- **STROBE LIGHT POSITION**

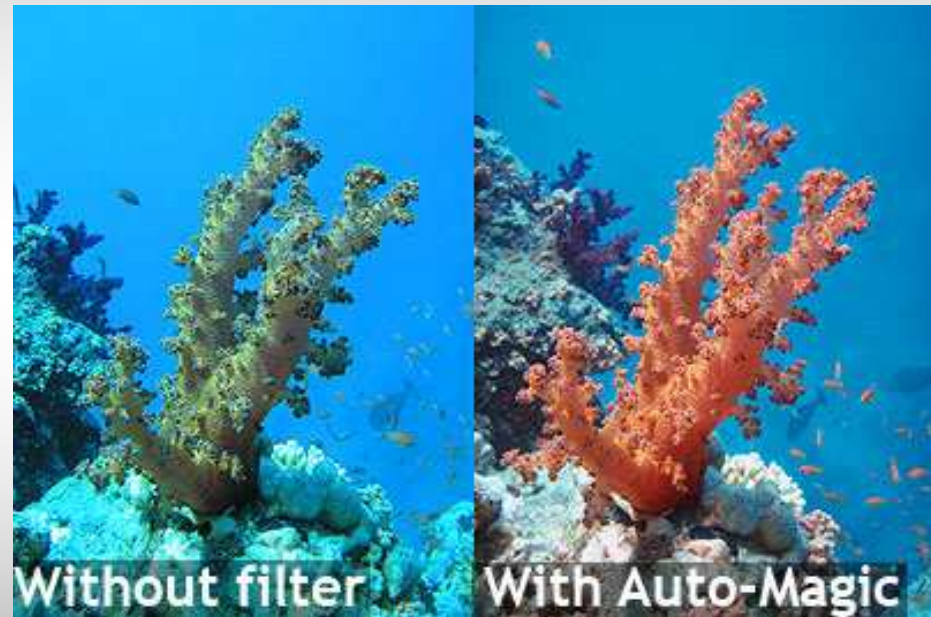
- SNOW COMES FROM LIGHT REFLECTED FROM DETRITUS AND PARTICLES IN THE WATER.
- MOUNT LIGHT SOURCE TO ONE SIDE
- MAKE SURE YOU HIT THE SUBJECT



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USING AVAILABLE LIGHT

- **WHITE BALANCE**
 - RESET CAMERA'S WHITE BALANCE AT EACH DEPTH TO OFFSET LACK OF RED.
- **MAGIC FILTERS**
 - ADD A COLORED FILTER AND THEN RESET THE WHITE BALANCE TO HELP PUT RED BACK
 - SEE www.magic-filters.com



<http://www.magic-filters.com/>

UNDERWATER PHOTOGRAPHY WORKSHOP

- **MAINTENANCE**

- FOLLOW MANUFACTURES GUIDELINES
- ALWAYS RINSE
 - AVOID SALT CRYSTALS
- MOISTURE / CONDENSATION INSIDE OF HOUSING PORT.
 - SILICA GEL
 - ASSEMBLE IN A/C



UNDERWATER PHOTOGRAPHY WORKSHOP

- **'O" RINGS**

- ALWAYS CLEAN AND INSPECT 'o' RINGS
- GREASED TO MOVE NOT TO SEAL
- MAKER SPECIFIC GREASE
 - SOME NOT GREASED BY DESIGN SO FOLLOW MANUFACTURES GUIDELINES
- DO NOT OVER GREASE. SHINY / FILM ONLY NOT LUMPS.
- WATCH FOR DIRT / HAIR ETC.



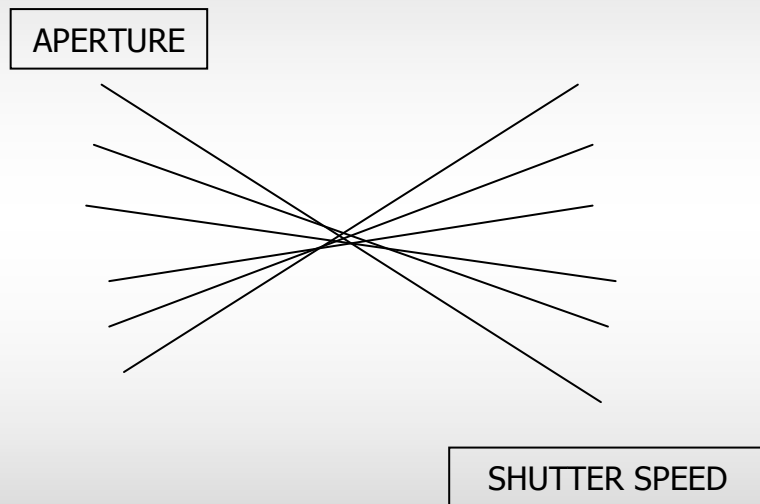
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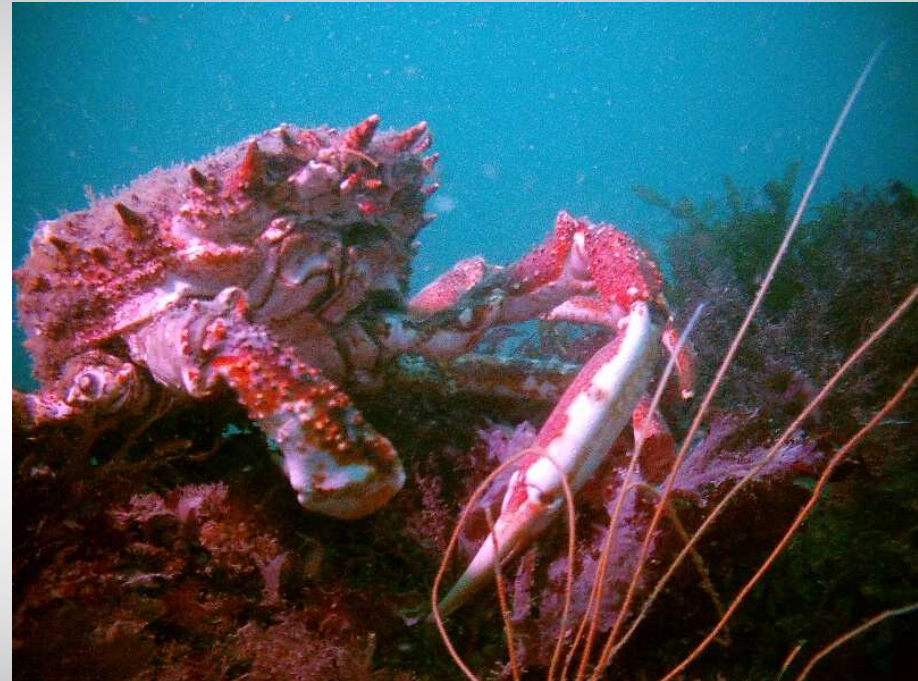


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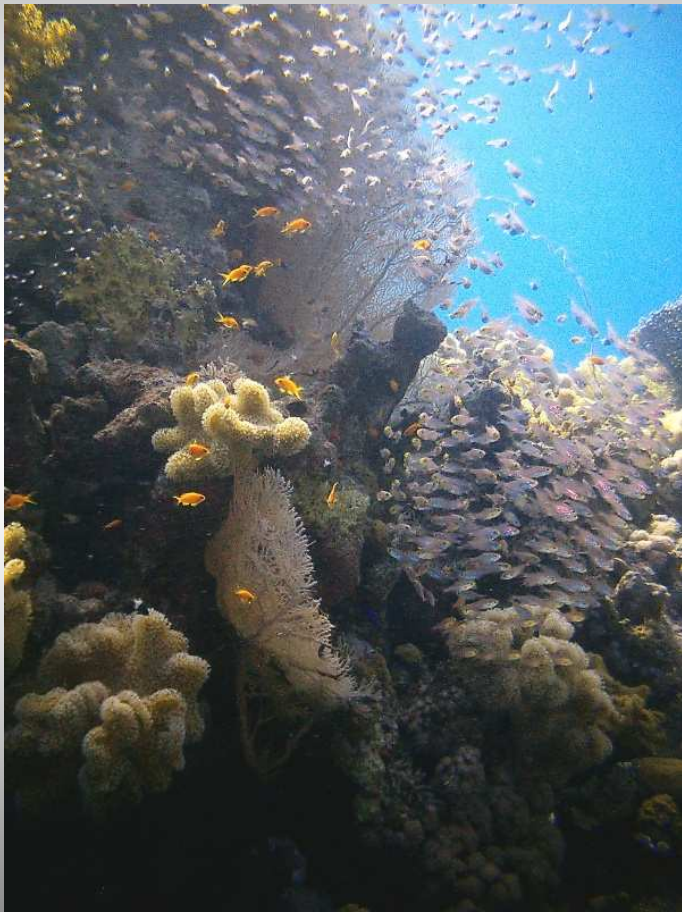
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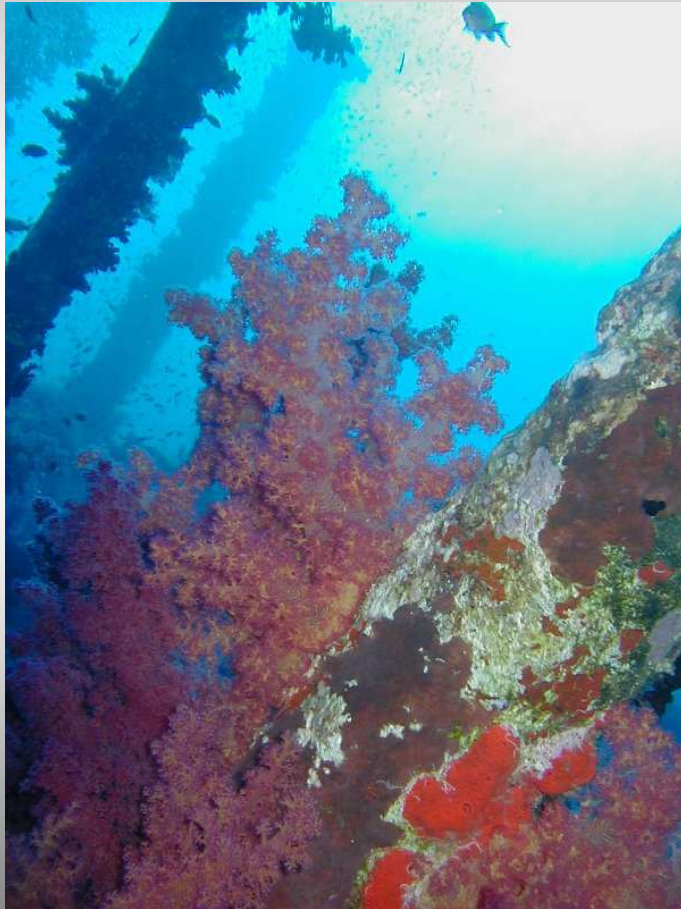
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UAE - SLR

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WORKSHOP

ANY QUESTIONS ?

NOW GO GET WET AND HAVE FUN

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COURSE PRESENTATION AT**

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www.wetpixel.com

