ANIMAL FLOW

L2

WORKSHOP

STUDENT MANUAL

ANIMAL FLOW®

LEVEL TWO WORKSHOP STUDENT MANUAL

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WELCOME FROM MIKE FITCH

Welcome to Level 2!
It's a pleasure to have you back at another Animal Flow® workshop. Over the next two days we'll be building on the foundations you've established with your Level 1 practice to provide you with new tools. Much like Level 1, we'll be focused on both the theory and practical application of new techniques throughout our time together.

Among the skills that we'll be working on, a significant portion of time will be spent taking you through the stages of assessing, preparing, and progressing for hand balancing. While we do not expect you to walk away with a high proficiency in your tuck balance, we are confident you'll have the tools with which to shape your practice and ultimately succeed.

In addition to hand balancing, you'll find the new transitions taught in Level 2 place a higher demand on coordination, mobility, or power and further challenge your proprioception in doing so. We'll even be incorporating new and familiar traveling forms into our flows and learning how to do so fluidly. Ultimately, our options for flow becomes endless with the techniques from both Level 1 & 2 combined.

When it comes to flow, Level 2 places a strong emphasis on incorporating concepts of kinetic energy with energy rolls, redirects, breaks, and constant but various motion. The understanding of how to use and direct energy builds on the knowledge of muscular subsystems and fascial lines that you developed in Level 1 while exploring this next layer of creating Flow.

Much like Level 1, we do not expect you to walk out of this workshop with mastery in any of the movements but rather to have a roadmap to continue exploring depth within this system.

I'm proud to have you as a member of our Animal Flow® community and am looking forward to seeing where your practice takes you.
Let's get started!

MIKE FITCH

ANIMAL FLOW

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CHAPTER 1

ANIMAL FLOW REVIEW

THE ANIMAL FLOW PILLARS

At its very core, Animal Flow is a system that bridges the gap between all other physical practices, in pursuit of previously unknown levels of physical proficiency. It is built on four pillars: Connection, Performance, Resilience, and Community.

PILLAR #1: CONNECTION

The most common misconception is that Animal Flow is about acting like animals. While there is an animal component in Animal Flow, the overall goal of the system is to improve the connection, communication, and function of the human animal. Being ground-based facilitates the process of making the experience someone has in their human body a much better one. When a person's hands and feet are in contact with the ground, discovering new motor tasks, their attention is immediately directed inward to their body. As such, we can use "connection" interchangeably with "communication" as we are inviting them back into their bodies and encouraging them to take ownership for how they move their vessel through space. Ultimately, this ability to connect will drive up mindfulness, cognition, and proprioception.

PILLAR #2: PERFORMANCE

When looking at the demands of any sport or activity, it is beneficial to look at the physical requirements that may be needed: We can describe these necessary attributes as "biomotor abilities" which essentially means physical abilities. A few that may come to mind are strength, power, coordination, balance, speed, endurance, flexibility, mobility. Most individuals will preferentially bias one or two of the abilities listed when solely focused on a sport or type of practice. For example, we may have a soccer player who works on their ability to have speed and endurance, a weightlifter who chooses to focus on strength and power, or a yoga practitioner who exhibits the abilities of flexibility and balance. If we then consider the concept of building a more complete and high-functioning human animal, it encourages us to look at all the biomotor abilities that may not be addressed. In this case, can we make the soccer player stronger and more coordinated, the yogi more dynamic (speed/power), and the weightlifter more pliable (mobile/flexible). Animal Flow was designed as a way to fill in the gaps in one's training; we use it as an adhesive to pull the biomotor abilities together.

PILLAR #3: RESILIENCE

The human body is an adaptation machine. It can recover from or adjust easily to change, is constantly figuring out ways to become more efficient at any consistent task and can endure repetitive stressors. Being adaptive in this fashion allows us to build our capacity for sports, workouts, and life alike. That said, the stressors must be consistent, not too much and not too little, and most importantly, they have to be specific. This law of specificity is also known as the *SAID* principle.

SAID (Specific Adaptations to Imposed Demands) is the basic principle behind all exercise: It states that the type of exercise stimulus (the stressors) placed on the body will determine the expected physiological outcome. Every system in the body (e.g neural, endocrine, muscular, skeletal, etc) will respond and adapt to the specific physical demands applied. Keep in mind, however, that this repetitive stress could very easily lead to a negative scenario within the musculoskeletal system over time if an individual performs the same movements, in the same ***planes of motion***, at the same joint positions, day after day.

In order to make our joints, muscle and connective tissue more resilient with the aim of potentially lessening the likelihood of injuries, we add variety. To do so, we break the patterns of repetitive stress in singular directions and add good mechanical stressors to the tissues of the body, in all directions, and at as many joint angles as possible. This is where Animal Flow is so advantageous for the resilience of the body as it imposes variable and novel loads in a quadrupedal position, encouraging all tissues to withstand stressors, bounce back, and perform longer. This ability to endure, without injury or degradation, is resilience.

PILLAR #4: COMMUNITY

Humans are wired to connect with each other and doing so can positively impact every aspect of health inclusive of improving the odds of survival when compared to social isolation. From the very first Animal Flow class in 2010, it became clear that the participants were forming a bond around their shared experience. As classes continued, Flowists were not only showing up for the movement but also to support, connect with, and positively challenge each other. Thanks in part to this, the cultivation of community was built on the concept of creating a space where everyone could feel safe to learn- and occasionally, fail. This self-focused practice benefits from being in the supportive company of others also seeking and moving towards a better understanding of their bodies. Over the past decade, the AF community has grown to a global scale spanning 42 countries and has a strong family dynamic.

THE SIX COMPONENTS OF ANIMAL FLOW

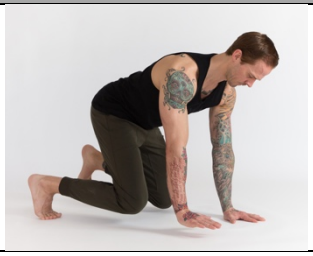
In Level 1, we learned about the Six Components that comprise all of Animal Flow. In Level 2 we'll be adding new moves to our exercise library, but these still all fit within our Six Components framework. This section reviews the Six Components. You'll want to make sure you are performing all of the Level 1 moves correctly, with total technical perfection, before taking on the new Level 2 moves!

Each of the Six Components are designed to elicit specific results. They can be mixed and matched in many ways, allowing you to incorporate one, some, or all of them in your workouts. The six components include:

COMPONENT 1: WRIST MOBILIZATIONS	
	*WRIST MOBILIZATIONS* are simple yet effective movements used to prepare the hands and wrists for the challenges of Animal Flow. Healthy wrists are so important to the success of both novice and experienced Flowists, that it's always our first component.

Wrist Mobilizations:

- are mobility drills performed before, during, and after Animal Flow practice
- are primarily passive exercises
- may increase the flow of blood, oxygen and nutrients to the soft tissue in and around the wrists
- provide an opportunity to gauge any pain, discomfort or restrictions that may be present; and
- prepare the wrists for the demands of quadrupedal movement and minimize the development of performance-reducing inflammation and discomfort.

COMPONENT 2: ACTIVATIONS	
	*ACTIVATIONS* are a way of "waking up" the body and encouraging it to communicate. The Animal Flow practice uses two activation positions, Beast and Crab, which are foundational forms in the overall program.

Activations are static/isometric holds that are systematically progressed by decreasing the points of contact with the ground.

These positions focus on "setting the system" for movement. They can be used to gather information or assess the body's global stability. Not only are they great assessment tools, but also can be used as part of a corrective exercise strategy. You'll notice these holds are intimately linked with the muscular subsystems and chains that make movement possible.

COMPONENT 3: FORM SPECIFIC STRETCHES (FSS)	
	*FORM SPECIFIC STRETCHES* are full body stretches that begin in a base animal position, then move through various ranges of motion. The goal of the FSSs is to encourage a combination of flexibility and stability (i.e., mobility) throughout the body's many articulations.

You'll find that the FSSs are not intended to be completely passive, as the goal is to create "strength through motion." However, you can hold them as an isometric position, or dynamically move into and out of them. FSSs can also be integrated into your flow design. Examples include: *APE REACH*, *CRAB REACH*, and *SCORPION REACH*.

COMPONENT 4: TRAVELING FORMS	
	*TRAVELING FORMS* are our animal locomotion movements. They represent the way we mimic animals to improve the function of the 'Human Animal'. We group these forms into the ABCs of animal movements: Ape, Beast, and Crab, along with their variations.

Although you may have experienced animal movements before, in Animal Flow they are taught with extremely precise parameters in order to improve upon the biomechanics of the human body.

The Traveling Forms are extremely versatile in their applications. They can be used as warm-ups, cool downs, metabolic conditioning, active rest, neural re-patterning, and more.

COMPONENT 5: SWITCHES AND TRANSITIONS (S&T)	
	*SWITCHES AND TRANSITIONS (S&T)* make up the bulk of the "flow" in the Animal Flow practice. These are dynamic movements that can be linked together to form endless combinations or can stand alone as a powerful exercise or drill.

In the Level 1 workshop, you'll learn each of the four categories of S&Ts, as well as their variations. The four categories are *UNDERSWITCH*, *SIDE KICKTHROUGH*, *SCORPION* and *FRONT KICKTHROUGH*.

COMPONENT 6: FLOWS	
	*FLOWS* are where all of the Animal Flow components come together. Flows can be performed in many ways, but there are 3 main styles: Choreographed, Call-Outs, and Free Flow. The potential combinations within each style are almost endless. In Level 1, flows are comprised of movements from the *FSS* and *S&T* components.

- A **Choreographed Flow** is designed with the intention of practicing it in order to become as seamless and fluid as possible. This would be similar to a dance or gymnastics routine.
- A **Freestyle Call Out** has the Instructor (or a fellow practitioner) calling out moves one after the other, while the Flowist follows along in real time. The focus in this case is on reaction time and precision. This can be very similar to a game of "Simon Says." Performing Call Outs correctly relies heavily on having a strong command of the Animal Flow Language which will be emphasized throughout the Level 1 course.

- **Free Flow** is just what it sounds like - you are free to practice a flow without pre-planning or listening to a call out. Your focus may vary depending on your goals that day - endurance, creativity, movement meditation, fluidity, improving the technical execution of the moves, and more.

Throughout this course, you'll be building the Kinetic Flow. Much like the Beast Flow in Level 1, this flow is just one example of the infinite possibilities in flow design. A part of the level 2 test out process involves creating and performing a 3-minute choreographed flow.

LEVEL 1 REVIEW CHART

Components	FSS	Form Specific Stretch/es
	S&T	Switches and Transitions
	TF	Traveling Forms
Bases	Beast	Static Beast
	Crab	Static Crab
	Ape	Deep Ape
	LB	Loaded Beast
Traveling Forms (TF)	FTB	Forward Traveling Beast
	RTB	Reverse Traveling Beast
	LTB	Lateral Traveling Beast
	FTC	Forward Traveling Crab
	RTC	Reverse Traveling Crab
	FTF	Forward Traveling Frog
	FTA	Forward Traveling Ape
	LTA1	Lateral Traveling Ape 1: Low Hip
	LTA2	Lateral Traveling Ape 2: High Hip
	LTA3	Lateral Traveling Ape 3: Reaching
Form Specific Stretches (FSS)	LBU	Loaded Beast Unload
	WU	Wave Unload
	BR	Beast Reach
	AR	Ape Reach
	CR	Crab Reach
	SR	Scorpion Reach
Switches and Transitions (S&T)	US	Underswitch
	USTap	Underswitch Tap
	JUS	Jumping Underswitch
	SKT	Side Kickthrough
	J-SKT	Jumping Side Kickthrough**
	L-SKT	Levitating Side Kickthrough**
	FS	Full Scorpion
	SS	Scorpion Switch
	FStep	Front Step
	FST	Front Step Through
	FKT	Front Kickthrough

*When writing a Jumping or Levitating Side Kickthrough, you'll see a L - or J - which would mean levitate or jump to.

CHAPTER 2

THE SCIENCE OF ANIMAL FLOW

The Animal Flow program certainly evokes a sense of fun and creativity, but it is still at its heart based solidly in science. It draws upon multiple, proven concepts within exercise science and kinesiology to formulate its overall approach to fitness and movement. The program is structured around several factors that contribute to its grounding in scientific research: It is entirely bodyweight training based, using closed-chain exercises to achieve goals; it emphasizes multi-planar and functional movement focused on anatomical subsystems; it is designed to integrate into a range of fitness programs and resistance training models; and it provides for assessment, regression, and progression with each step.

The specific exercises that comprise Animal Flow are themselves highly effective examples of various exercise modalities designed to increase mobility, flexibility, stability, power, endurance, skills, and neuromuscular development. Every movement included in the program has a specific function.

THE HUMAN BODY AND MOVEMENT

Before we dive into the specifics of Animal Flow and its benefits for the human system, it's relevant to begin with our view of the body.
If you've spent time studying anatomy in some form, then it's likely that you've been exposed (at the very least in the earliest stages of study) to a compartmentalized view of the human body. In this view, the skeletal system provides the foundations and scaffolding that supports the many various other systems (such as the muscular, circulatory, and respiratory systems) that contribute to human movement.

There is much that we don't know about the human body, yet literature now abounds in support of an integrated system approach, where no process or operation occurs in isolation. While it can be helpful to take a simplistic approach by looking at individual muscles and joints, it's vital to remember that we are infinitely more complex and integrated machines.

Animal Flow is comprised wholly of multi-joint movements that are based on the premise of known integrated patterns in the body. With that said, each movement is only as good as the sum of its parts.

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MUSCLE SYNERGIES AND FASCIA

Muscle Synergies

In order to create movement, the Central Nervous System optimizes the selection of muscle synergies, not isolated muscles. Examples of these muscle synergies of movement, can be described as "global muscular systems" (NASM Corrective Exercise).

The global muscular systems are responsible predominately for movement and consist of superficial musculature that originate from the pelvis to the rib cage, the lower extremities, or both. Exercises that focus on working these groups through the entire sling provide excellent benefits for improving the way we walk, run, and move (Liebension 2004; Pool-Goudzwaard 1998).

The movement system muscles have been broken down and described as force-couples, working in four distinct subsystems (NASM):

- ***Deep Longitudinal***
- ***Anterior Oblique***
- ***Posterior Oblique***
- ***Lateral Subsystem***

These subsystems are intimately linked with the global flexion and extension synergies chains of the human body. These chains are typically known as the:

- ***Anterior (flexion) Chain***
- ***Posterior (extensor) Chain***

What is the Anterior/Flexion Chain?
Including the pectorals, abdominal musculature, hip flexors and quadriceps, the Flexion (or Anterior) Chain is responsible for spinal and hip flexion, assists to create pelvic stability, and eccentrically decelerates extension of the spine and hip.
What is the Posterior/Extensor Chain?
A direct counterpart to the Flexion Chain, the Extensor (or Posterior) Chain includes the spinal erectors, trapezius, posterior deltoids, gluteals, hamstrings and calves. This chain plays a critical role in keeping our bodies in their upright postures by facilitating hip and spine extension.

What is the Anterior Oblique Sling?

The Anterior Oblique Sling helps to create stability through the spine and hip, while also acting as a means of force transmission between the upper and lower limbs. It also opposes the Posterior Oblique Sling by decelerating the movements of spinal extension and rotation.

- Obliques
- Adductors
- Rectus abdominis
- Pectoralis major
- Serratus anterior

What is the Posterior Oblique Sling?

The Posterior Oblique Sling provides opposition to the flexion and rotation created through the body by the Anterior Oblique Sling. Movements that require us to pull and rotate are informed by the Posterior Oblique Sling, while spinal flexion, hip flexion, as well as hip internal rotation and adduction, are all decelerated by it.

- Gluteals
- Thoracolumbar fascia
- Contralateral latissimus dorsi
- Lower trapezius

What is the Lateral Subsystem?

Ever wondered how you manage to keep your hips steady when you walk up a flight of steps? That's the Lateral Subsystem. Largely responsible for stabilizing the pelvis and spine, the Lateral Subsystem plays a critical role in gait and single-leg movement.

- Gluteus medius
- Adductors
- Tensor fascia latae
- Contralateral quadratus lumborum

What is the Deep Longitudinal Subsystem?
This particular subsystem is all about stabilizing the body longitudinally, between the foot and ankle, and the torso, in both directions. - Erector spinae - Thoracolumbar fascia - Sacrotuberous ligament - Bicep femoris

While the explanations above provide a succinct and compartmentalized way to view muscle synergies, it's important to remember that all subsystems and chains contribute to all movement to varying degrees.

Fascia

The movement capabilities of the human body do not rely on the muscular systems alone. These subsystems would not be able to properly do their job without the vital role that fascia plays.

Remember that compartmentalized view of the human body that we mentioned before, with the skeleton acting like a continuous compression structure, similar to that of a house? We now understand that to be a somewhat limited perspective. Thanks largely in part to fascia, our bodies are tension-dependent structures – we're much more like a mobile but stable tensegrity ('tension' and 'integrity') model than the immovable foundations of a house. We're an intricate balance of tension and compression, with the fascia and muscles working together to suspend the skeleton. This means that rather than our bones holding everything up, they actually 'float' inside the soft tissue, resulting in our bodies acting to distribute strain across the entire structure.

Fascia is a type of soft tissue, but also an entire system that forms a whole-body, continuous three-dimensional matrix of structural support around our organs, muscles, joints, bones and nerves. This multidirectional, multidimensional fascial arrangement is also what allows us to move in multiple directions.

You can think of this continuous fascial net as our 'soft skeleton'.

> "…imagine a silvery-white material, flexible and sturdy in equal measure – a substance that surrounds and penetrates every muscle, coats every bone, covers every organ, and envelops every nerve. Fascia keeps everything separate yet interconnected at the same time." (Lesondak 2017).

To gain a visual image of how fascia is connected: picture the film or wrap that you cover your food up with when it goes into the refrigerator. What happens when the two sides accidently touch? It can be an impossible task trying to pull this stuff apart when those two surfaces stick to each other. This wrap is also very similar in principle to *fascia* within the body.

Lesondak, in his book *Fascia: What it is and why it matters* identifies four categories of fascia based on location.

1. **Superficial fascia**. This is the layer that sits between our skin and muscle, facilitating the 'slide and glide' action between the two. Superficial fascia plays a role in managing our body temperature, our circulation, and waste product removal (via the lymphatic system).
2. **Deep fascia**. This is the layer that is responsible for the transmission of myofascial force. The deep fascia is a "dense, well-organized fibrous layer that covers muscles" and helps to disperse muscular tension.
3. **Meningeal fascia** is the fascia that envelops the brain and nervous system.
4. **Visceral fascia** surrounds the heart, lungs, and organs in the abdominal cavity.

Fascia is incredibly important for health, movement, and athletic performance. Some of the most important points include:

- ✓ **Stress reduction**: Fascia helps reduce stress in a particular muscle, joint or bone, by spreading forces across the body.
- ✓ **Energy conservation**: Fascia also helps to conserve energy. By stretching and loading (like an elastic band) it helps harness momentum created from movement, so rather than using energy wastefully, energy can in effect be recycled thanks to the elastic properties of fascia.

  Communication and reaction time: Research suggests that connective tissue like fascia has a large proprioceptive input to the nervous system, i.e. it is sensitive and communicates! Indeed there may be up to 10 times more proprioceptors in fascia than in muscle (Stecco et al 2010). Proprioceptors effectively provide input to the CNS, which in turn provides information about what positions the joints are in, how fast the joints are moving, and how much stress or tension the joints are experiencing.

  Therefore, the fascial matrix which covers the entire body helps us react to our environment faster than the conscious mind can respond.

Combining Muscular Subsystems and Fascia

Thomas Myers provides an excellent overview of fascia in his book Anatomy Trains (Myers 2001). He detailed a network of fascial lines that run in various directions, connecting the entire body. From an anatomical perspective, the muscular subsystems and chains described above also have distinct congruencies with the fascial lines he proposed.

The chart below demonstrates how Myers' fascial lines are similar to each of the muscular subsystems

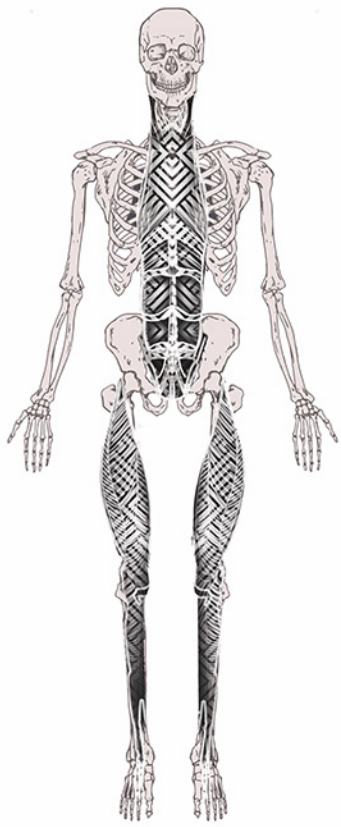
MUSCULAR SUBSYSTEMS	MYERS' FASCIAL LINES
Flexion Chain	Superficial Front Line
Posterior Chain	Superficial Back Line
Posterior Oblique Sling	Back Functional Line
Anterior Oblique Sling	Front Functional Line
Lateral Subsystem	Lateral Line

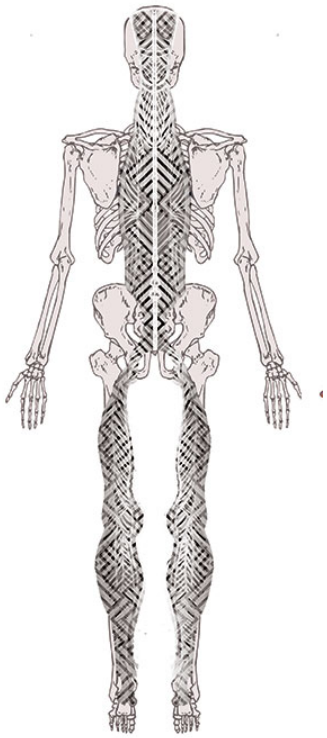
Both the muscular subsystems and fascial networks work simultaneously to produce complex movements that are effective and efficient, providing proprioceptive information and distributing/dissipating forces. Throughout the Animal Flow workshop, these concepts will be a staple part of the understanding and application of the AF movements.

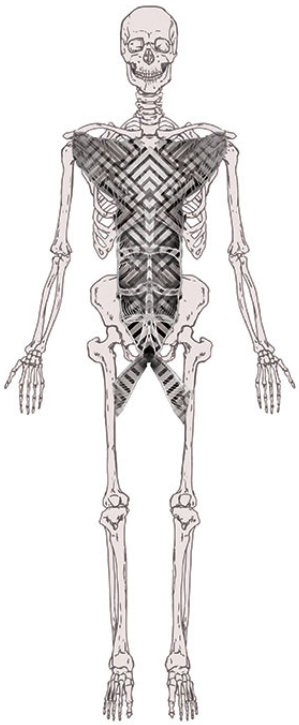
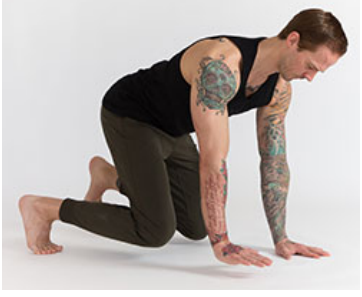
The following pages visually highlight the relationship between the fascia (as defined by Myer's Anatomy Trains), muscle synergies, and a movement from the Animal Flow library.

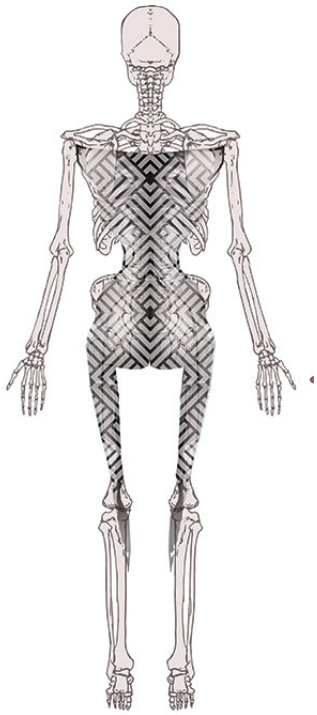
FASCIA, MUSCLE SYNGERGIES, AND ANIMAL FLOW

In the diagrams below, we've displayed representations of the fascial lines (skeleton figures on left) and muscle synergies (figures in center), along with some sample corresponding Animal Flow movement that emphasises the line/chain/sling.

Superficial Front Line	Flexion Chain	AF Examples
		**STATIC BEAST**  **FRONT KICKTHROUGH** 

Superficial Back Line	Extension Chain	AF Examples
		**WAVE UNLOAD**  **STATIC CRAB** 

Front Functional Line	Anterior Oblique Sling	AF Examples
		**SIDE KICKTHROUGH**  **CONTRALATERAL BEAST ACTIVATION (LIMB LIFT)** 

Back Functional Line	Posterior Oblique Sling	AF Examples
		**FRONT STEP**  **CONTRALATERAL CRAB ACTIVATION (LIMB LIFT)** 

Lateral Line	Lateral Subsystem	AF Examples
		**UNDERSWITCH**  **LATERAL APE (V3)** 

BENEFITS OF QUADRUPEDAL MOVEMENT

The quadruped position, with both hands and both feet on the ground, is the base position for Animal Flow. There is growing evidence supporting the efficacy of movement based around this position.

> "The coordination between arms and legs during human locomotion shares many features with that in quadrupeds, including reliance on propriospinal connections." (Sylos-Labini 2014).

Crawling

Learning to crawl plays an important role in our early neurodevelopmental stages. A baby experiences the process of locomotion through both reptilian and mammalian crawling phases. These phases are incredibly important for developing neural coordination, while simultaneously building muscle synergies that will be the foundation for bipedal gait.

Crawling benefits include:

- ✓ Stimulating and organizing neurons to help cognitive processes like comprehension, concentration, and memory
- ✓ Establishing hand/eye coordination important for reading, writing and sports activities
- ✓ Conditioning binocular vision, i.e., looking off into the distance and then back at the hands
- ✓ Strengthening both the left and right side of the brain by practicing cross-lateral movement, which allows increased communication between the two sides of the brain and enhancing learning

The benefits of quadrupedal movement are not just reserved for the young.

Lee Burton and Gray Cook (2012), developers of the Functional Movement Screen (FMS), emphasize the importance of what they call "primitive movement patterns," (i.e. rolling, pushing, quadruped, and crawling) in providing a strong foundation for developing effective functional movement. Referencing the long-standing usage of primitive patterns in physical therapy practices, they recommend that fitness professionals utilize these patterns to identify problem areas, and in particular to focus

on the stabilizers, rather than prime movers. Burton and Cook's primitive patterns are similar to some of the positions utilized in Animal Flow. For example, the Static Beast Activations are used to identify asymmetries and imbalances in one's rotary stability system.

There is much support regarding the benefits of stabilizing the body in a quadrupedal form; partly due to the closed-chain nature of the position as well as the requirement to actively engage the body's core. Research into the benefits of more complex quadrupedal movements for adults is still a newer field. There has, however, been at least one peer-reviewed published study documenting the cognitive benefits for adults using quadrupedal movement training (QMT). This study has specifically used Animal Flow movements for its four-week quadrupedal training program for participants.

The study, "*Quadrupedal movement training improves markers of cognition and joint repositioning,*" (Matthews et al, 2016) found the following conclusion:

> Performance of a novel, progressive, and challenging task, requiring the coordination of all 4 limbs, has a beneficial impact on cognitive flexibility, and in joint reposition sense, although only at the specific joint angle directly targeted by the training. The findings are consistent with other studies showing improvements in executive function and joint reposition sense following physical activity.

A second study also utilised Animal Flow movements for its eight-week quadrupedal training program to assess the impact of QMT on functional movement, dynamic balance, range of motion, and upper body strength and endurance.

The study, "*The Effects of a Novel Quadrupedal Movement Training Program on Functional Movement, Range of Motion, Muscular Strength, and Endurance*," (Buxton et al, 2020) came the following conclusions:

> The QMT group showed significantly greater improvements than the [control] group in FMS composite score, FMS advanced movements, and fundamental stability, along with hip flexion, hip lateral rotation, and shoulder extension Our results indicate that QMT can improve FMS scores and various active joint ranges of motion. Quadrupedal movement training is a viable alternative form of training to improve whole-body stabilization and flexibility.

**The full articles are available at animalflow.com > About > Science of AF*

Communication

Communication is one of the central benefits of the Animal Flow practice. This includes not only the communication that one has consciously with their body (sense of self/ spatial awareness) but also the interconnected communication throughout the human movement system (nervous, muscular and skeletal).

Proprioception

One of the ways that the body communicates with itself to produce safe movement is by relying on feedback from receptors that are constantly gathering information about both the internal body as well as the external environment. This information is considered proprioception.

Here's a useful description of proprioception from NASM:

> Proprioception is one form of sensory (afferent) information that uses mechanoreceptors (from cutaneous, muscle, tendon, and joint receptors) to provide information about static and dynamic positions, movements, and sensations related to muscle

force and movement. Lephart defines proprioception as the cumulative neural input from sensory afferents to the central nervous system. This vital information ensures optimum motor behavior and neuromuscular efficiency. This afferent information is delivered to different levels of motor control within the central nervous system to use in monitoring and manipulating movement (NASM Essentials of Corrective Exercise).

Interlimb neural coupling

It may seem strange, but there's a fascinating neural connection that exists between your arms and your legs. If you've spent any time in a CrossFit box, it's likely that you've seen someone performing handstand walks, their legs moving in opposition to their arms. This example is interlimb neural coupling in action. Why does this happen?

In the 2016 paper titled *Neuromechanical interactions between the limbs during human locomotion: an evolutionary perspective with translation to rehabilitation*, Zehr et al. offer this:

> "Evidence accumulated in humans suggests that the basic neural elements controlling and coupling the arms and legs during coordinated rhythmic movements are similar to those in habitually quadrupedal animals."

It's believed that these shared neural networks known as central pattern generators have remained relatively untouched by evolution and are commonly shared by animals of all kinds. (Geurin 2013.)

Next time you're walking, take notice of how your arms move unconsciously, or go for a run and see how your leg turnover increases if you pump your arms faster – both of these are examples of the interconnected nature of the upper and lower extremities.

Sensory Information

Both the feet and hands have an incredibly high number of sensory receptors. This makes for a proprioceptively rich environment when the hands and feet are in contact with the ground, as in quadruped. But the information feed doesn't just stop there. As mentioned above, there are mechanoreceptors in muscle, tendon and joints that are sensitive to load. In the quadrupedal position, almost every articulation and its corresponding soft tissue is loaded by the body's own weight, as it resists the downward pull of gravity.

All of this information sets the stage for the body to communicate on a very high level. The hips must speak to the shoulders, through the spine, out to the limbs and vice versa.

This communication advantage is further explained in the concept of Closed-Chain Exercise

Vestibular perception

In addition, once you get into the practice of Animal Flow, you'll note that there are plenty of opportunities for repetitive rotations through movements such as Underswitches and Full Scorpions. For some new Flowists, repetitive rotary movements can induce dizziness but the great news is that long-term training could possibly result in adaptations to the vestibular system. These include possible uncoupling of reflex and perception when exposed to a vestibular stimulus, and even changes in brain matter that correlates with vertigo resistance. (Nigmatullina et al. 2015).

Closed Chain Exercises

All movements within Animal Flow are closed-chain exercises, which means that limbs connect to the ground or another object in a constant, fixed position, and resistance is created by pushing or pulling against it, moving the body, rather than the object.

Closed-chain exercises can lead to greater motor unit activation and synchronization (NASM 2012), and controlled studies have documented enhanced performance when utilizing closed-chain form of weight training compared to open-chain (Augustsson et al 1998; Brindle 2006). The biomechanics of closed-chain exercises mean that multiple joints and multiple muscle groups are worked at once, making them a "functional" form of exercise likely to produce superior results. The multiple joint and muscle action is considered more functional because real-life daily activities and sports activities tend to require utilization of multiple muscles, rather than isolated muscles and joint actions.

ADDITIONAL BENEFITS OF ANIMAL FLOW

Animal Flow is a truly 100% bodyweight-training program, which requires no equipment and utilizes only the individual's own bodyweight and gravity as resistance. Bodyweight training in general has long been accepted as an effective means of exercise, with numerous studies demonstrating that it is equal to or better than other forms of exercise (Harman et al 2008; McRae et al; NASM 2012; Ozer et al).

Multi-planar movements

Bodyweight training also includes multi-planar aspects that produce greater kinesthetic awareness (NASM 2012) and are functional in nature.

The benefits of multi-planar training are closely related to those described with closed-chain exercises. Just as with closed-chain exercises, the goal with multi-planar training is to utilize the entire body to move and/or stabilize instead of working an isolated muscle. Most day-to-day activities and resistance training programs are sagittal plane dominant. The lack of training in the transverse plane can lead to more injuries resulting from rotations and/or pattern overload, making it even more important to pay more attention to this area.

By involving all of the major muscle groups, multi-planar training provides a balanced training approach that helps increase overall function and decreases the risk of injury. As the movements are made more complex, the CNS is stimulated to create and refine motor engrams applicable to sport and life making it a particularly functional form of training (Quelch 2007). Going even farther, tri-planar movement, which incorporates all three of the sagittal, frontal, and transverse planes of motion, is considered a particularly progressive form of fitness training (Quelch 2007).

Animal Flow aims to engage in these complex, multi-planar movement patterns through the combination of movements, many of which are already multi-planar on their own, into longer "flows," where the body is constantly changing direction, tempo, and plane. Multi-planar, functional exercise attempts to reproduce the movements that the kinetic chain undergoes during normal activities of daily life and sport.

Leverage

The ability to regress or progress moves to meet the needs of individual participants without needing any additional equipment is an important component of Animal Flow. As with all bodyweight training disciplines, Animal Flow employs the concept of leverage as one of the primary means of increasing or decreasing the difficulty of specific moves. It is a basic tenant of bodyweight training that changes in body position

– i.e. leverage - have a direct and significant impact on the amount of force production, muscular activation, and myoelectrical activity (Cogley et al; Garcia Masso et al). A number of studies have used analysis of push-up position variations to measure how something as simple as hand position can significantly influence muscle activity (Gouvali and Boudolos 2005; Suprak et al 2011).

Understanding the role of leverage in affecting the requirements and results of any given exercise is integral to the Animal Flow® program; thus, much time is spent reviewing highly specific body positions for each movement. Emphasis is placed on understanding how altering body positions including hand placement, foot placement, and degrees of angles can make a move more or less difficult for a participant.

Ground Reaction Forces

"For every action, there is an equal and opposite reaction." This is Newton's 3rd Law of Motion. Regardless of whether you're standing still or jumping up and down, you're dealing with ground reaction force – the reciprocal force relationship that is being exerted on, and by your body at all times. For every pound or kilogram of force that you express down into the ground, the same amount of force is being experienced by your system. In Animal Flow, we use these ground reaction forces to our advantage, helping us distribute strain, develop strength and experience healthy stress as a result of the neuromuscular response to press away from the ground. This mechanism occurs when we find ourselves fighting gravity while in a quadrupedal position.

CHAPTER 3

LEVEL 2 MOVEMENTS

HAND BALANCING: THE TUCK BALANCE

Hand balancing can be an elusive skill and takes years to truly master: The goal of the Level 2 training is to introduce the assessments, mobilizations, conditioning, and skill practice that will build the pathway towards achieving a Tuck Balance.

When embarking on any hand balancing endeavour, there are four main factors to consider: Fear, Joint Range of Motion (ROM), Structural Integrity, and Proper Progressions. When we take these into account and build a program around them, we'll increase the likelihood of success, reduce frustration, and gain the specificity required for the skill.

1) **Fear**
   First and foremost, fear is a very normal and important reaction to the thought of inversion, particularly in adult trainees. Adults are acutely aware of the risks involved with having the majority of our bodyweight above our head and neck; apart from select few, it's the least comforting orientation to be in.
   Fear can be alleviated by ensuring that the right joint requisites are in place and that the proper progressions are implemented; without these, the body will do what it can to help us keep our feet firmly on the ground. All the tools covered from assessments to skill development are prescribed with the aim of creating safety, comfort, and strength within the nervous system.

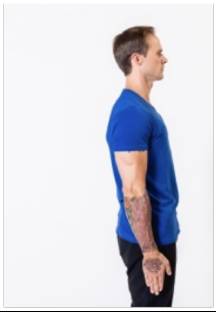
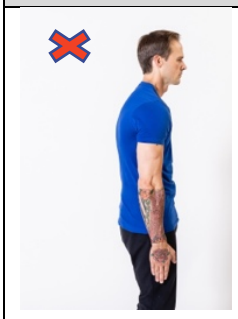
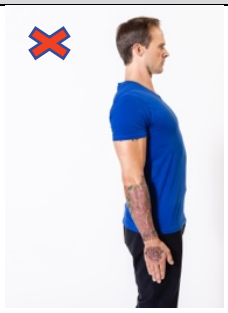
2) **Joint ROM:**
   When observing the perfect tuck balance, it is easy to see why adequate range at the shoulders and wrists is especially important. If any range at the wrists or shoulders is found to be lacking, the top priority will be to restore range before progressing to skill practice. Training against restrictions in range of motion places greater demand on other joints to compensate and can increase the risk of injury.
   For a successful practice, the required ranges are:
   a. Wrist Extension: 90 degrees
   b. Shoulder Flexion: 180 degrees

3) **Structural Integrity:**
   While having sufficient range of motion is of utmost importance to be able to load the body properly, we also need to gain stability and adaptation in all tissues necessary for maintaining a tuck balance. This is a matter of accumulating time through specific conditioning and will ensure we have the joint integrity necessary for skill practice.

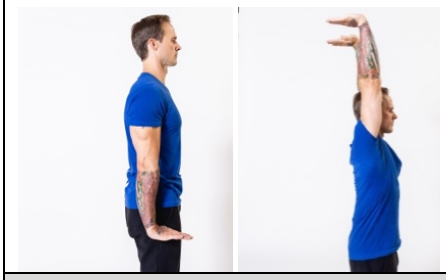
4) Proper progressions & Consistency:

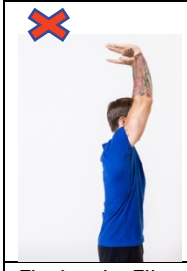
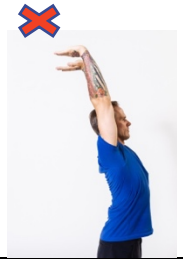
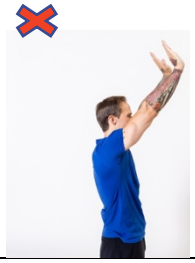
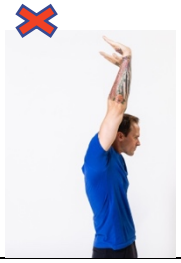
A focused strategy will result in much safer, faster, and more consistent acquisition of the skill set. The four factors listed here can offer a pathway but, if not addressed, will present as roadblocks along someone's tuck balance journey.

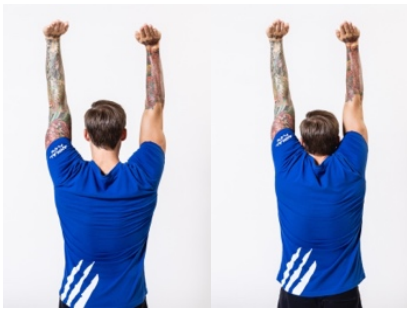
TUCK BALANCE ASSESSMENTS

Circumference Brace	
	- In a kneeling or standing position, lift into a "tall" posture with your torso. - Brace by thinking of pulling the ribs down and anchoring them onto the pelvis. - Avoid flexing through the spine as you brace.
Common Errors	
 Hollowing or Flexing the Spine	 Flaring the rib cage/extension of the lumbar

Wrist Extension: 90 Degrees	
	- In a kneeling or standing position, hold the arms straight down by your sides with your palms facing behind you. - Set your circumference brace - Pull your fingers forward and up towards the ceiling while keeping the arms straight by your sides until the palms are parallel to the floor (this is 90 degrees).
Common Errors	
 Bent Elbows and/or lack of 90 degrees	  Eversion or Inversion of the hands

Shoulder Flexion: 180 Degrees	
	- In a kneeling or standing position, hold the arms straight down by your sides with your palms facing behind you. - Set your circumference brace - Keeping your elbows extended, raise your arms overhead until they are in line with your ears (this is 180 degrees).

Common Errors				
				
Flexing the Elbows	Flaring the rib cage	Lack of 180 degrees	Neck and head pulling forward	Adducting the arms

Close the Gap	
	- All tuck balances in Animal Flow require a "Closed Gap" position which serves to increase safety and stability at the cervical spine. - Ensure that you can effectively close the gap between the shoulders and the ears by shrugging/driving the shoulders up.

TUCK BALANCE PREPARATION
STRETCHES

Wrist Flexor Stretch	
	- In a kneeling position, place your palms flat on the ground with your fingers pointing back towards your feet and thumbs out to the sides. - Sit Back towards your heels to elicit a stretch sensation - Keep your elbows straight throughout the duration of the stretch. - Hold for at least 2 minutes - Add in 10s isometric contractions as needed by pressing fingers and hands down into the ground then trying to lift the palm up off the ground.

Shoulder Flexion Lat Stretch	
 	- In a kneeling position facing a bench or chair, sit your hips back towards your heels, allowing light flexion of the lower back. - Place your hands shoulder-width apart on the chair with thumbs pointing up to the ceiling. - Drop the chest down between the arms, keeping the head and neck neutral. - Hold for at least 2 minutes - Add in 10s isometric contractions by pressing your hands down into the surface then by trying to lift thumbs up to the ceiling.

*After gaining range of motion across any joint, it is important to lock it in with a motor task!

TUCK BALANCE PREPARATION
MOBILIZATIONS/ACTIVATIONS

FRC Floor Swimmer	
	- In a prone position, extend your arms overhead with thumbs facing the ceiling. Create a circumference brace and lower body tension. - Initiate by lifting the arms up to the first point of restriction.
	- Reach through the fingertips as you slowly internally rotate the arms and move them down towards your hips.
	- Continue to internally rotate as much as possible as you move the arms down towards your hips
	- Lightly land the arms down to the ground with the thumbs pointing up towards the ceiling. - Reverse the sequence by lifting, externally rotating and reaching back up to the start position.

Floor Pike (Scapular Elevation)	
	- From Static Beast, push the hips up, dropping head between arms - Close the shoulder gap (second photo) - Hold for 30 seconds at a time *Note: the knees can bend if the hamstrings are tight

Scapular Depression	
	- In a seated position, place your hands directly beside your hips with the fingers pointing to the sides. - Maintain a tall posture with your eyes directly forward throughout the duration of the hold. - Drive straight down towards the ground with the shoulder blades. - Hold for 30 seconds at a time *Note: use blocks or risers underneath your hands if you cannot place the full palm on the ground.

Prone Protraction	
	- In a prone position, place your hands palm-down on the ground beside you with your elbows slightly back behind your shoulder level. - Press the shoulder blades as far apart as possible. - Allow the abdominal wall to stay engaged which may lift the hips off the ground. - Hold for 30 seconds at a time

Prone 45 Retraction	
	- In a prone position with your nose nearly touching the ground, extend your arms down beside your body at a 45-degree angle with the arms externally rotated (thumbs pointing up). - Lift your thumbs up to the ceiling as high as possible by squeezing the shoulder blades together. - Hold for 30 seconds at a time

TUCK BALANCE
CONDITIONING VS SKILL

Hand balancing practice can be split into two main categories: Conditioning and Skill. Combined, they address the need for structural integrity and proper progressions previously discussed as primary factors that will ensure success in hand balancing.

Conditioning Safety: In any conditioning drill, it is important to ensure that there is sufficient energy remaining after the hold to come out of it with control.

1) **Conditioning:**
   Conditioning drills are those that are held for long durations, elicit muscular fatigue, and utilize support to create a strong sense of safety within the position. By using support in the form of a wall or bench, fear is reduced which makes beginning a tuck balance journey more accessible. Further to that, support allows us to perform max or sub-max holds to develop structural integrity, muscular endurance, tissue tolerance, and comfort within the tucks.
   a. A new trainees practice will largely be spent conditioning with drills done as frequently as 3-4 times per week.
   b. It is strongly recommended that a baseline of 60 seconds in the Pike 90 position is achieved before progressing to wall-supported drills.
   c. Videotaping your practice will ensure that you are spending time in the correct position. Precision in your positioning will allow you to transfer your conditioning work directly into the specificity needed for your skill practice.

Skill Safety: Learning how to spin out is an integral part of beginning your skill practice as it ensures that you have a safe exit strategy. We recommend that you practice spinning out before undertaking any skill specific drills with or without support.

2) **Skill**
   Skill practice, by contrast, is done for very short durations, elicits neural fatigue, and is done with minimal support resulting in a reduced sense of safety. It is for this reason that proper conditioning is crucial to building up an internal sense of comfort and awareness within the tuck position. To further improve safety with the lack of support, a proper exit strategy is required to safely land any over-balanced reps. Ultimately, the goal of skill practice is to be able to successfully integrate tucks into flows.

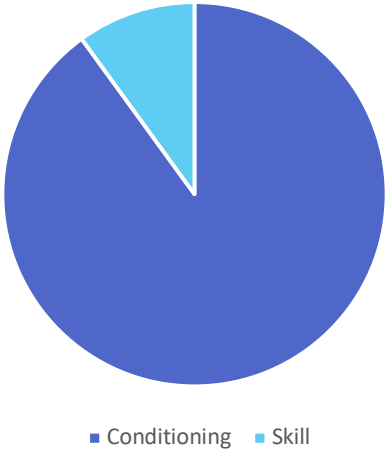
a. A conditioned trainee will start adding “best effort” repetitions of tuck balances into their Animal Flow practice 1-3X/week. Best effort implies that we do not want to keep performing repetitions if the quality is declining.
b. It is strongly recommended that you do not continue your practice when frustrated or fatigued: Train tucks as fresh as you can.

c. Videotaping your practice will ensure you are getting the necessary visual feedback to check that your shoulder line is open and that your knees are below hip level.

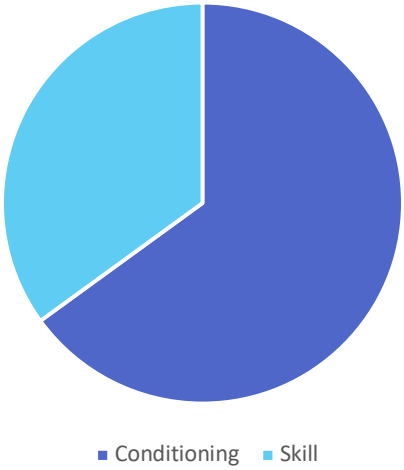
As previously mentioned, tuck balances take time and progress will not always be linear. Consistent practice with the right progressions for your body will help develop long term success even though there will be times when the skill seems elusive.

CONDITIONING VS SKILL PRACTICE OVER TIME

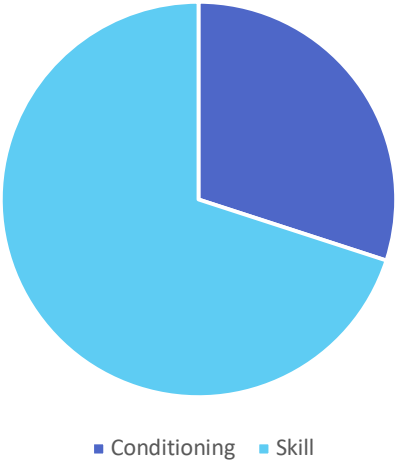
Beginner



Intermediate



Advanced

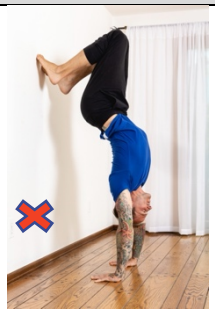


TUCK BALANCE PREPARATION
THRESHOLD TESTING & CONDITIONING

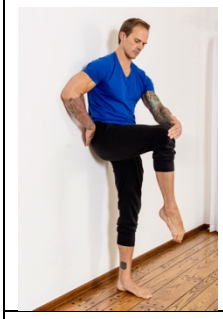
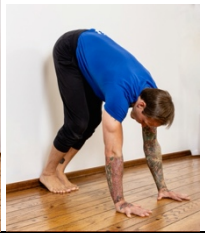
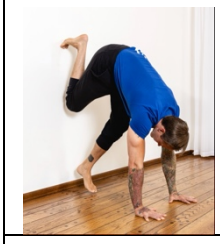
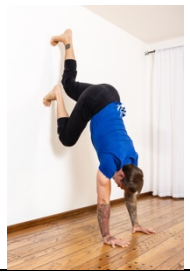
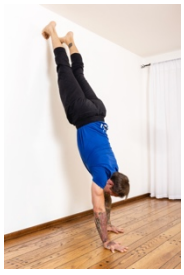
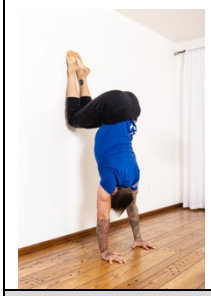
Conditioning Eye Position	
	- During all conditioning drills, the eyes are set to the new "horizon" while closing the gap at the shoulders - Neck should be neutral the head will be between the arms

Pike 90	
	- Set up with a chair or bench anchored against a wall or on a surface that will not slide. - Place your hands shoulder-width apart in front of the chair, step up onto the chair with your feet, and extend legs to push the hips up to align them directly over the shoulders and hands. - Close the gap at the shoulders and keep the eyes to the horizon - Hold for as long as possible while maintaining the shoulder position - Exit safely by stepping down *Note: the knees can be slightly bent provided that the hips are still stacked directly above the shoulders and hands.

Back to Wall Supported Tuck	
	- Set up facing the wall - Place your hands exactly shoulder-width apart and lift the hips up to HHMB. *Note: You can elevate the base foot on a solid surface to reduce the effort required to kick up to the wall.
	- Drive off of your base leg into a tuck position with your toes touching the wall and knees pulling both together and down towards the floor - Close the gap at the shoulders and keep the eyes to the horizon - Hold for a max duration while being able to control your exit from the position.

Back to Wall Supported Tuck Cont'd			
Common Errors			
	× Knees up to ceiling with open hips		× Set too far away, resulting in excessive lordosis

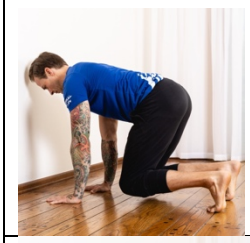
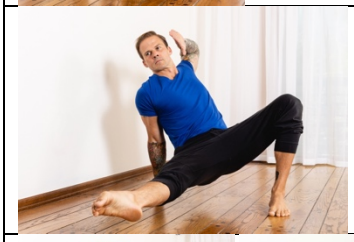
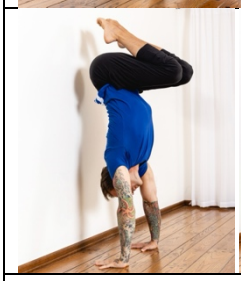
Notes:

Stomach to Wall Supported Tuck	
 	- With your back against the wall, measure your femur length away from the wall - Note the distance as this will dictate where your hands will have to walk to - Set your hands on the ground slightly in front of the space you just measured
 	- Begin to walk your feet up the wall - Keep your hands in place on the floor
 	- Continue to step up the wall until both legs are fully extended and tops of the feet are in contact with the wall - Walk the hands in closer to the wall to the femur-distance previously marked on the ground - Ensure that your hands are still shoulder-width
	- Set your eyes to the horizon and close the gap at the shoulders - Slide the tops of the feet and shins down the wall until your knees are either in line with or slightly below your hip line. - Hold for as long as you are able while keeping enough energy to exit the movement safely. *Note: To return safely, reverse the entire sequence by sliding the legs back up the wall, walking the hands out, then stepping down.
Common Errors	
	× Hands are too far away from the wall and the shoulders fall behind the hand line
	× Hands are setup too close to the wall, preventing the knees from aligning with the hips

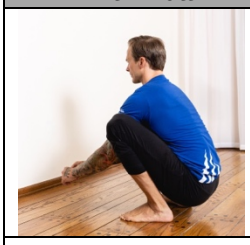
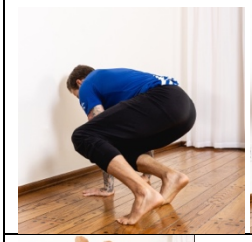
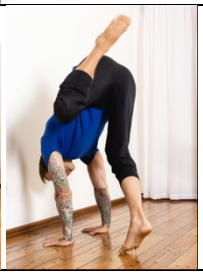
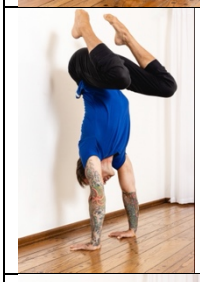
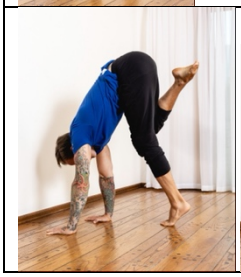
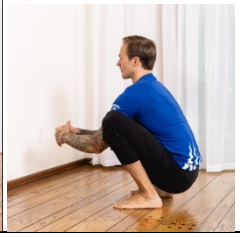
TUCK BALANCE TRAINING
SKILL PRACTICE

Skill Practice Eye Position	
	- During all skill practice drills, the eyes are set to the base of the palms - The neck will be in slight extension though still between the arms rather than forward through the arms.

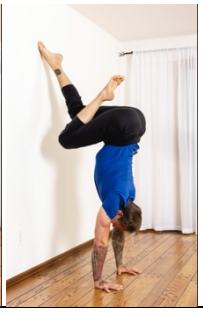
Spinning Out- Safety Net	
	- To safely exit a free-standing balance, practice spinning out - Set up in a wall-supported tuck - Pick up one hand and place it perpendicular to the other hand.
	- Kick away from the wall
	- When done properly, the rest of the body will follow and will allow for a controlled landing. - It is valuable to practice this intentionally a few times to be able to rely on this exit strategy reflexively

Levitating SKT with Wall	
	- Set up in Beast with the top of your head close to the wall
	- Perform a Side Kickthrough
 	- Levitate up to a tuck position, using the wall as needed to find a strong tuck position with your knees pulling down towards the ground - Close the gap at the shoulders and keep the eyes to the base of the hands - Exit via HHMB
	- Finish in the opposite leg SKT and repeat

Notes:

LTA2 with Wall	
	- Set up in Deep Ape, facing a wall
 	- Perform a Lateral Travel Ape V2
	- Levitate up to a tuck position, using the wall as needed to find a strong tuck position with your knees pulling down towards the ground. - Close the gap at the shoulders and keep the eyes to the base of the hands.
 	- Exit via HHMB to finish in Deep Ape

HHMB Kick Ups	
 	- Set up with your head towards the wall in HHMB - Ensure that your hands are shoulder-width apart and that your eyes are spotting the base of your palms - Dip down on your base leg to then power up
 	- Your tucked leg will touch the wall first with the toes, followed by your base leg. - Pull the knees down towards the ground - Close the gap at the shoulders and keep the eyes to the base of the hands - Land lightly on the opposite leg and repeat the drill

Stomach to Wall Freestanding	
	- With your back to the wall, place your hands shoulder-width apart on the ground further than femur-length away. - Walk the feet up until legs are fully extended and set the tops of the feet against the wall. - Close the gap and keep the eyes to the base of the palms
 	- Move one leg directly down into a tuck position - Slide your other leg down towards a tuck position with the foot on the wall
	- Pull the second leg off of the wall into a tuck position: Pull the knees as close together and as far down as you're able. - Continue to close the gap at the shoulders and keep your eyes to the base of the palms.
Common Errors: See common errors for Tuck Balance Leg and Shoulder positions below	

Notes*:*

Tuck Balance Leg Positions	
 **Option #1:** A true Tuck has the knees set together and at sub-hip level	 **Option #2:** Knees are set apart in straddle and at sub-hip level
 **Option #3:** Knees are set together and aligned at hip level	 **Option #4:** Knees are set apart in a straddle and aligned at hip level
Common Errors	
 × Closed shoulder line and eyes in front of hands	 × Knees above hip line

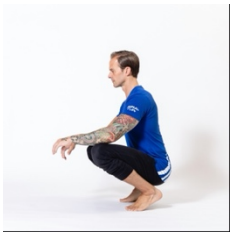
**The top priority in any tuck is to ensure that the shoulder line remains fully open. Utilize whichever leg option will facilitate that and work from there.*

Notes:

SWITCHES & TRANSITIONS

REACHING UNDERSWITCH

Call Out	
Intention	

Movement Sequence- Reaching Underswitch	
	- Set Deep Ape
	- Lift the heels by pressing on the gas.
	▪ Reach the Call Out arm forward at a 45-degree angle ▪ Simultaneously reach the opposite arm back at a 45-degree angle, turning the thumb to the ground ▪ Look to where you want to land
	▪ Reach beyond your base of support towards the ground with your hand ▪ Begin to "fall"

Progressive Drills

1. Set Ape, Lift Heels, Find 45-degree rotary arms. Reset to Ape.
2. Look, reach, fall and rotate through the window to end in Crab.

Common Errors

- × Not starting in Deep Ape
- × Not "pushing on the gas"
- × Missing both arms at 45
- × Elbows bending
- × Reaching too far
- × Reaching too close
- × Missing the 180-degree rotation
- × Loss of control
- × Failing to finish in a perfect Crab

SWITCHES & TRANSITIONS

REACHING UNDERSWITCH CONT'D

Movement Sequence- Reaching Underswitch		Test Out Guidance/Notes
	- As soon as your hand makes contact with the ground, continue through the window by bringing the Call Out leg through the window.	
 	- Land the contralateral hand and foot at the same time. - Finish in a perfect Crab posture oriented to 180 degrees from the starting position.	

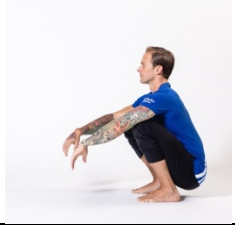
SWITCHES & TRANSITIONS
UNDERSWITCH TO DEEP APE

Call Out	
Intention	

Movement Sequence- Underswitch to Ape

- Set Crab

- Lift contralateral limbs and press on the gas.
- Begin to underswitch
- Simultaneously reach the arm back at a 45-degree angle, turning the thumb to the ground



- Land the Call Out foot in alignment with your base foot at the distance needed for your Deep Ape
- Allow the Call Out lower leg to align next to the base ankle
- Bring the eyes down to the feet to confirm placement
- Continue to reach the rotary arm back

- Drive off of the base arm as you swing the back arm forward.
- Land the heels
- Finish in a perfect Deep Ape with eyes to the horizon, 180 degrees from the starting position

Mid-point Transfer

Progressive Drills

1. Set Crab, Lift Limbs, Underswitch to midpoint with 45-degree rotary arm reaching back. Reset to Crab.
2. From a pause in midpoint, Drive and Swing, allowing the rotary arm to swing across midline to assist the finish in Deep Ape.
3. Practice the full transition hitting midpoint then driving & swinging without a full pause

Common Errors

- × Not starting in Static Crab
- × Not "pushing on the gas"
- × Failing to reach the arm back to 45 with thumb down
- × Elbows bending
- × Reaching the foot too far or close
- × Missing the Rotary arm swing
- × Missing the 180-degree rotation
- × Loss of control
- × Failing to finish in a perfect Deep Ape

SWITCHES & TRANSITIONS

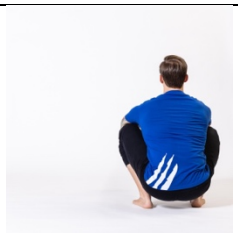
SCORPION SWEEP

Call Out	
Intention	

Movement Sequence- Scorpion Sweep	
	▪ Set Deep Ape
 	- Lift the heels and shift the torso towards the Pivot leg - Place the hands on either side of the Pivot leg, in line with the knee.
Front view:  Top view: 	▪ Bend the elbows back. ▪ Allow both the Pivot knee and the forehead to drop close to the ground ▪ Extend the Call Out leg to Sweep, directly to the side with the knee lightly bent and the big toe in contact with the ground"

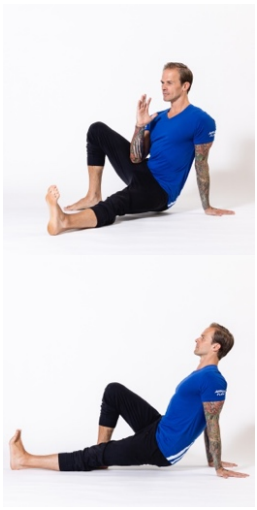
Progressive Drills
1. Set Ape, Load the Pivot leg, Set the Sweep Leg. Reset in Ape 2. In a High Hip Squat, Load the Pivot leg, Set the Sweep leg. Throw and Sweep to rotate 180 degrees. 3. Set Ape, Load the Pivot Leg, Set the Sweep Leg, Throw and Sweep. Finish in Deep Ape.
Common Errors
× Not setting the hands on either side of the Pivot leg × Keeping or lifting the head too high × Falling off of the Pivot heel × Leaving the Pivot leg behind × Extending the Sweep knee × Losing ground contact with the big toe of the Sweep leg × Missing the 180-degree rotation × Loss of control × Failing to finish in a perfect Deep Ape

SWITCHES & TRANSITIONS
SCORPION SWEEP CONT'D

Movement Sequence- Scorpoin Sweep		Test Out Guidance/Notes
	- Begin to Sweep the Call Out leg - Simultaneously throw the ground away with the hands - Maintain a low head position with the torso in contact with the pivot leg	
	- As you sweep, bring the pivot leg with you, keeping the hip on top of the heel - Maintain ground contact with the big toe on the sweeping leg.	
Front View:  Top View: 	▪ As you complete the rotation, pull the sweep leg underneath you.	
	- Land the heels Finish in a perfect Deep Ape, 180 degrees from the starting position	

SWITCHES & TRANSITIONS
CROCODILE ROLL

Call Out	
Intention	

Movement Sequence- Crocodile Roll	
	- From a Modified Crab Position, Close the Gap: - The straight leg's knee and base ankle connect as the hand lands
	- Push off of the flat foot and swing the rotary arm to transfer to Side Plank on the Call Out leg - Stabiilze on the outside of the Call Out leg's foot with the ankle remaining in dorsiflexion - Allow the traveling ankle to regain contact with the knee - Allow the rotary arm to bend, palm facing the ground
	▪ Pull the Call Out leg's toes upwards to assist rolling onto the ball of the foot into Modified Push Up ▪ Simultaneously plant the traveling hand shoulder-width apart and protract the shoulders ▪ Maintain hips at or just below shoulder level

Progressive Drills
1. Set Crab, Full Scorpion, Close the Gap, Open the Gap 2. Pop Switch 3. Set up, Jump to First Side Plank. Reset 4. Set Up, First Side Plank, Modified Push Up. Reset 5. Set Up, First Side Plank, Modified Push up, Hip to Floor, Finish the rotation, Pop Switch. 6. Full Crocodile Roll

Common Errors
× Not closing the gap × Starting with the hips on the ground × Missing the Jump to First Side Plank × Wrapping the ankle around the knee × Bending the Call Out leg × Failing to drop the hips before completing the rotation × Landing the foot before the heel and hand × Loss of control

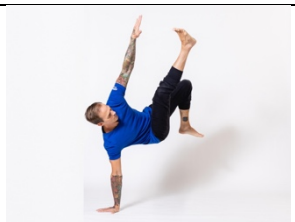
SWITCHES & TRANSITIONS
CROCODILE ROLL CONT'D

Movement Sequence- Crocodile Roll		Test Out Guidance/Notes
	- Rotate into Second Side plank, releasing the new traveling hand and anchoring the instep of the base foot against the ground	
	▪ Lower the hips towards the floor	
 	- Continue the rotation to the base leg's heel, maintaining hips 1" off of the ground - Drop the hand - Drop the traveling foot last to finish the movement.	

SWITCHES & TRANSITIONS

POP OUT

Call Out	
Intention	

Movement Sequence- Pop Out	
	- Begin in a Crocodile Roll position
	- Kick up with the Height leg while jumping off of the Power Leg
	▪ Throw the Rotary arm straight up towards the height foot
 	▪ Continue the rotation and look to where you want to land

Progressive Drills

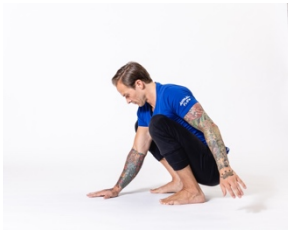
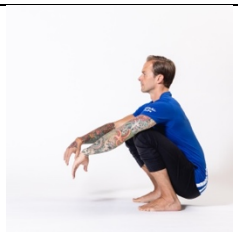
1. Set up, Height & Power
2. Set up, Height & Power, Reach for Toes
3. Set up, 1, 2, 3 to Reach and Look (Pop Out)

Common Errors

- × Starting with the hips on the ground
- × Bending the height leg during the kick
- × Missing the rotary arm
- × Failing to rotate 180 degrees
- × Not landing in Deep Ape
- × Loss of control

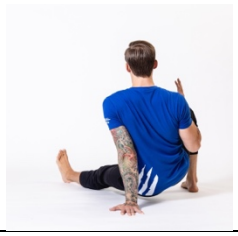
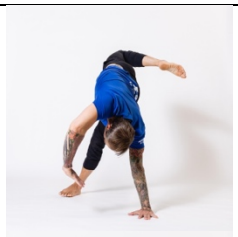
SWITCHES & TRANSITIONS

POP OUT CONT'D

Movement Sequence- Pop Out		Test Out Guidance/Notes
	- Land in Deep Ape, 180 degrees from the start position - Base hand is in contact with the ground upon landing	
	▪ Lift the base hand off of the ground to finish in a perfect Deep Ape.	

SWITCHES & TRANSITIONS
ROLL THROUGH

Call Out	
Intention	

Movement Sequence- Roll Through	
	- Begin in a Modified Crab position
	- Extend the Guard arm down to the ground, straightening the elbow to become a rotary arm
	- Throw the Rotary arm overhead in a circle while powering off of the Call Out leg to bring the hips up
 	▪ Internally rotate the Rotary arm to land the hand perpendicular and inside of the base hand ▪ Pull the Call Out leg's knee into the chest

Progressive Drills
1. Full Scorpion, Reach, Drive up and over to midpoint. Reset back down. 2. Full Scorpion, Drive up to Midpoint, Rotate down and under to finish 3. Full Scorpion, Roll Through

Common Errors
× Starting with the hips on the ground × Failing to use a rotary arm × Keeping the hips low × Missing midpoint × Landing the traveling hand too far × Landing the traveling hand without internal rotation × Landing the base heel too soon without over-rotating × Plantarflexing the extended leg's ankle × Lifting the extended leg as in a Kickthrough × Loss of control

SWITCHES & TRANSITIONS
ROLL THROUGH CONT'D

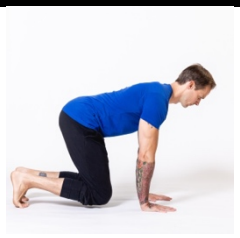
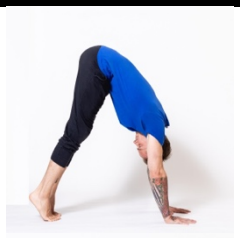
Movement Sequence- Roll Through		Test Out Guidance/Notes
	- As soon as the hand lands, pull the Call Out leg's knee into the chest	
	- Lift the new traveling hand as you bend the base leg to begin to bring the body through the window	
	- Land the Call Out leg's heel and slide the leg out to extension at 45 degrees	
	▪ Keep the base heel high to continue to rotate ▪ Keep the traveling hand close to the body in guard position	
	- Land the base heel to finish the movement.	

TRAVELING FORMS

BEAR

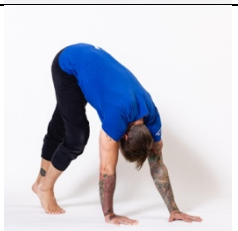
Call Out	
Intention	

Movement Sequence- Bear

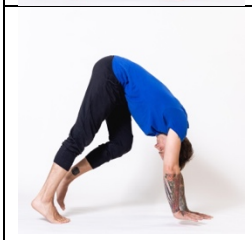




- From Beast, lift the hips up and drive the heels high off of the ground, allowing head to drop between arms
- Eyes are set to the horizon back towards the knees
- Close the gap at the shoulders


- Lift contralateral limbs at the same time, keeping the base heel high off of the ground
- Stride equal distance

- Land limbs at the same time with the knee of the traveling leg lightly flexed
- Heels remain high




- Drive up to extend the bent knee, allowing the same side hip to lift
- Heels stay high
- Allow the Drive to help lift contralateral limbs to initiate the next stride

Common Errors

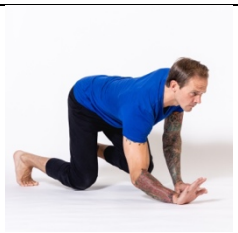
- × Not lifting or landing the limbs at the same time
- × Dropping the heels
- × Looking between hands or forward
- × Failing to close the gap at the shoulders
- × Loss of control

Test Out Guidance/Notes

TRAVELING FORMS

LEOPARD

Call Out	
Intention	

Movement Sequence- Leopard	
 	- Set up with hands shoulder-width apart, feet and knees hip-width apart and knees underneath the hips - Push the hips back slightly and bend both elbows - Eyes look forward through the brow
	- Keep the base of the palm lightly on the ground by lifting the fingers up - Reach with the striding hand as you step with the striding foot -
	▪ Base arm stays bent throughout the stride ▪ Land the hand, extend the elbow, and push the shoulder towards the ear
  	▪ Re-bend the new base arm to initiate another stride ▪ Lift the fingers, sliding the palm forward while striding the opposite foot ▪ Land the hand and extend the elbow, allowing the shoulder to push towards the ear

Common Errors
× Setting up in Beast × Looking down × Not moving contralateral limbs × Extending both elbows × Failing to re-bend the elbow before the next stride × Failing to keep the knees 1” from the ground

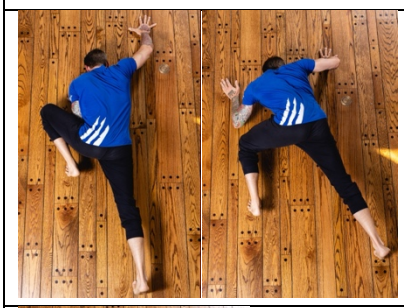
Test Out Guidance/Notes

TRAVELING FORMS
CROCODILE CRAWL

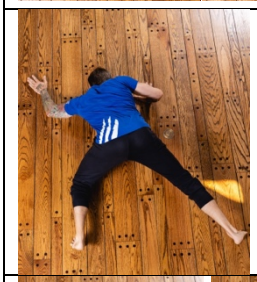
Call Out	
Intention	

Movement Sequence- Crocodile Crawl


- Set up with one side of the body Open: same-side limbs fully extended
- Set the other side of the body in a Closed position: bend the knee up with heel high, and tuck the same-side elbow inside the knee.
- Keep the neck long and eyes down to the ground



- Begin the stride by flexing the extended elbow and allowing the shoulder to internally rotate
- Reduce weight on the traveling limbs while keeping the hand and big toe in contact with the floor



- Stride by creating a wide circular pattern
- Maintain the hand and big toe contact
- Keep the torso as stable and close to the ground as possible


- Finish with the striding arm in an Open position and the striding leg in a Closed position.

Common Errors

- × Incorrect start position
- × Not flexing the elbow to initiate the stride
- × Lifting the body away from the ground
- × Missing the circular pattern
- × Elbow outside of the bent knee
- × Loss of control

Test Out Guidance/Notes

CHAPTER 4

FLOW DESIGN & LANGUAGE

FLOW DESIGN

While the Level 1 workshop focused on learning the mechanics of the Animal Flow moves, how they transfer over into the structural and movement integrity of the human body, and the basics of flow, the Level 2 workshop focuses a bit more on introducing elements of performance as well as incorporating traveling forms into flows. The movements are much more dynamic and, in some cases, require explosiveness while in others, greater strength or endurance.

The overall goal is to create efficiency of movement and learn how to seamlessly transfer from one movement to another, thus creating a visual and physical flow.

A few concepts discussed in Level 2 that help us achieve this within our flows are as follows:

- **Energy Rolls**
  Anytime force or momentum is created within a movement and is then carried on in the same direction of rotation for subsequent movements, it is considered an energy roll. We create energy in one direction and continue to utilise it in that direction.
  An example of an energy roll is:
    - Set Crab, RL RUS, LL JUS, LL US-A, RL RUS, LL FS

- **Energy Redirects**:
  Anytime force or momentum is created within a movement in one direction then is followed by a movement in any other direction, it is considered a redirect. We create energy in one direction then move the energy elsewhere.
  Examples of an energy redirect are:
    - Set LB, RL FKT, Pop Back- LL SKT
    - Set Crab, RL FS, LL FS, RL FS, LL FS

- **Energy Breaks:**
  Anytime we create force or momentum to then stop dramatically, it is considered an energy break. We create energy in order to stop energy suddenly and this serves almost as a visual punctuation mark within your flow.
  Energy breaks can occur nearly anywhere in a flow by choosing to stop sharply at the end of a movement or transition.

- **Constant but various motion**:
  Within a L2 flow, the ability to transfer from one movement to the next smoothly throughout a flow without any distinct pauses or mechanical breaks within

movements serves to create constant motion. Various motion refers to the ability of the experienced flowist to utilize slow, medium, and fast tempos as well as the energy rolls and redirects listed above to create their flows. “Constant and various motion” thus results in a flowist who understands the precise technique parameters of each movement whilst also being able to blend the edges of movements together in an interesting and fluid way that creates a story within their flow. Every movement has the potential to provide multiple opportunities for tempo variability which changes the look and feel of the movement: This means that the same flow can be performed in a myriad of ways.

LANGUAGE

As you learned in Level 1, one of the most important parts of teaching Animal Flow is how well you communicate it to your clients and/or others you are practicing with. The "Animal Flow Language" uses specific terms and syntax that are the same throughout the world. Understanding this language helps ensure that your Call Outs are consistent and can be followed by any Flowist.

Level 2 builds upon the foundations set in L1 with the addition of traveling forms, new switches and transitions, and "side" as a direction in the call out formula. As always, the Call Out language allows you to deliver vital information in the shortest amount of time. In doing so, Flowists can react quickly, maintaining fluidity as seamlessly as possible.

Following are some important rules regarding the terms and syntax for Call Outs as well as the additional layers provided within Level 2.

SET BASE POSITIONS

The base positions to start a flow remain the same in L2 as they were in L1: We will always "Set" one of the following four animal forms: Crab, Beast, Ape, Loaded Beast.

Base Position Options	**Call Out**
Deep Ape	"Set Ape" or "Set Deep Ape"
Static Beast	"Set Beast" or "Set Static Beast"
Static Crab	"Set Crab" or "Set Static Crab"
Loaded Beast	"Set Loaded Beast"

CALL OUT FORMULA (GENERAL): DIRECTION > LIMB > COMMAND

One of the most important parts of the Animal Flow language is our Call Out formula. This formula informs the way we verbally instruct the movement that is to be performed.

1. **DIRECTION**: Left, Right denoted as L and R
2. **LIMB**: Arm, Leg, or Side* denoted as A, L, and Sd
3. **COMMAND**: The name of the actual movement.

**In Level 2, we have the addition of "Side" as it relates to Crocodile Rolls and Pop Outs.*

No matter where you go in the world, the Call Out formula is communicated the same way.

DIRECTION > LIMB > COMMAND

DIRECTION and LIMB instructions are communicated in the chosen language of the speaker but the COMMAND is always spoken in English.

CALLING OUT THE ACTION IN KICKTHROUGH VARIATIONS

Recall from Level 1 that there are TWO exceptions to the DIRECTION > LIMB > COMMAND order: Jumping Side Kickthrough and Levitating Side Kickthrough.

In these variations, you need to first call out the ACTION they are about to perform, followed by the rest of the Call Out so that our new formula becomes:

ACTION > DIRECTION > LIMB > COMMAND

For example:

"JUMP to Left Leg Side Kickthrough" or "LEVITATE to Right Leg Side Kickthrough"

In both instances, the Call Out is telling you how you're transitioning from one SKT into the other leg SKT.

Note that this Call Out Formula also applies to all transitions between Side Kickthroughs and Front Kickthroughs or Modified Crab. For example:

- **Side Kickthrough to Side Kickthrough**: Use "Jump to" to transition between sides

- **Side Kickthrough to Front Kickthrough**: Use "Jump to" to transition to a Front Kickthrough, landing at a 90-degree angle from where your SKT was pointing.
- **Front Kickthrough to Side Kickthrough**: Use "Pop Back to" to transition back through a Modified Beast position and into a Side Kickthrough, landing at a 90-degree angle from your FKT.
- **Modified Crab to Side Kickthrough Option 1**: Use "Jump to" to transfer to a Side Kickthrough landing 180 degrees from where your Modified Crab's extended leg was pointing.
- **Modified Crab to Side Kickthrough Option 2**: Use "Pop Back to" to transition backwards through a Modified Beast position and into a Side Kickthrough, landing at a 90-degree angle from where your Modified Crab's extended leg was pointing.
- **Modified Crab to FKT**: Use "Jump to" to transition to a Front Kickthrough, landing at a 90-degree angle from where your Modified Crab's extended leg was pointing.
- **Modified Crab to FKT in the same direction**: If you'd like to "Jump to R/L leg FKT" from a Modified Crab that lands in the same direction that you were facing, this is considered a choreographed transition. In this case, additional information is required to dictate the desired direction of the landing.

*Remember: We never Jump or Levitate to a Side Kickthrough from a Static Beast, Loaded Beast or Static Crab. In order to call out a Jump or Levitation, we have to first be in one of our acceptable straight leg positions like Side Kickthrough, Front Kickthrough or Modified Crab.

CHANGING ANIMAL FORMS: SET

When changing from one animal base to another, we would use the word SET, just as when we establish the starting or base position for a flow.

We can use SET:

1. To begin a flow in one of the four possible base positions.
2. To move from a base position when an S&T is not available.
3. To SET a base position when the movement did not just come directly from there within the flow.
4. To cue the flowist to retract an extended leg to Set Crab.
5. To cue the flowist to retract an extended leg from a Modified Crab into a Crab base to continue into a Crab Reach.

In Level 2 we have some alternatives to "Set" between Ape and Crab

If this is your Base Position...	And want to change to...	You'd do it this way...	And you'd say...
Deep Ape	Static Beast	SET	"Set Beast" or "Set Static Beast"
	Loaded Beast	SET or Pop Back	"Set Loaded Beast" or "Pop Back to Loaded Beast"
	Static Crab	Underswitch	"Right/Left Leg Reaching Underswitch"
Static Beast	Loaded Beast	SET	"Set Loaded Beast"
	Deep Ape	SET	"Set Ape" or "Set Deep Ape"
	Static Crab	Underswitch	"Right/Left leg Underswitch"
Loaded Beast	Static Beast	SET	"Set Beast" or "Set Static Beast"
	Deep Ape	SET	"Set Ape" or "Set Deep Ape"
	Static Crab	Underswitch	"Right/Left leg Underswitch"
Static Crab	Deep Ape	Underswitch	"Right/Left Leg Underswitch TO Ape"
	Static Beast	Underswitch	"Right/Left leg Underswitch"
	Loaded Beast	Underswitch	"Right/Left leg Underswitch TO Loaded Beast"

There are, however, some caveats to using the SET command:

1. We would never use the word SET when changing from a Crab to Beast or Crab to Loaded Beast. Instead, we'd use an Underswitch as it is a far more fluid option.
2. We would never SET a Modified Crab since a Full Scorpion or Scorpion Switch is, again, a more fluid option for getting into a Modified Crab.
3. Likewise, we would never SET a Crocodile Roll position within a flow as there would be other options for using "to/into". For example, using "to" from a Reaching Underswitch, a Full Scorpion, or a Roll Through present us with fluid transfers.
4. In Level 2, we no longer need to use SET to transition between Crab and Ape as we can use a Reaching Underswitch or Underswitch to Ape to do so fluidly.

RETURNING TO THE ORIGINAL POSITION: RETURN TO

The call out "Return to" instructs Flowists to do exactly that: return on the known path to a position that the movement typically originates from. The "Return To" command is used primarily with FSS, Front Steps, and Front Step Throughs. Any time we have someone in the Reach Position of a FSS, they must stay there until we tell them to "Return to" the place they started via the known path for that FSS.

For example:

"Set Crab, Right Leg Underswitch Tap to Left Arm Crab Reach, Return to Crab"

"Set Loaded Beast, Wave Unload - Return to Loaded Beast"

There are, however, some parameters around the use of Return To, particularly as we expand our ability to end somewhere other than where we started in L2.

Return To is used:

1. When returning to Loaded Beast, Crab, or Ape from a Form Specific Stretch via the known pathway for that FSS.
   a. *Set Loaded Beast, Right Leg Scorpion Reach, Right leg Beast Reach, Return to loaded Beast*

      → This example requires the flowist to return via the path for Beast Reach up to Peak before descending to Loaded Beast.

   b. *Set Loaded Beast, Right leg Beast Reach, Right leg Front Step, Return to Loaded Beast.*

      → This example requires the flowist to return via the pathway for Front Step, thus stepping directly back to Loaded Beast.

   c. *Set Loaded Beast, Wave Unload, Return to loaded Beast to Left leg Scorpion Reach, Return to Loaded Beast.*

      → This example requires the flowist to first return up towards Peak out of extension wave to then lift the left leg into Scorpion Reach. The final "Return to" is used to indicate that the flowist must now bring the left leg through the return pathway for Scorpion Reach.

2. When returning to Loaded Beast from a Front Step, Front Step Through or Front Kickthrough that originated in Loaded Beast.
   a. *Set Loaded Beast, Left Leg Front Step Through, Return to Loaded Beast*

      → *The flowist will step back through the window to return to LB.*

b. *Set Loaded Beast, Right Leg Front Kickthrough, Return to Loaded Beast*

   → *This requires the flowist to step back through the window to return to Loaded Beast as a jump back would require a different call out.*

If the Front Step, Front step Through, or Front Kickthrough did not originate from LB, we can use the command "Set" to bring them back to Loaded Beast. For the FKT or FST we also have the option of using "Pop back to Loaded Beast".

For example:

a. *Set Crab, Right Leg Full Scorpion, Jump to Right Leg Front Kickthrough…"Pop Back to Loaded Beast" OR "Set Loaded Beast"*

   → The first option denotes a jump backwards whereas the second denotes a step back. "Return to" was not used because the FKT position did not originate from Loaded Beast.

POP BACK

As you will recall from Level 1, we typically use the phrase "Pop back to Loaded Beast" to match the explosive nature of the FKT movement. The "pop" in this scenario, means that you want them to jump back into the Loaded Beast position, versus just stepping back. To simplify, Pop Back is used to indicate we are jumping the feet backwards behind the hand line.

Using L1 movements, the command "Pop back to" can also be used from a Front Kickthrough position to transition back into a Modified Beast Transfer, thus allowing us to either:

1. Travel under the movement window as seen in a Side Kickthrough.
   a. *Set Loaded Beast, Right leg Front Kickthrough, Pop back to Left leg Side Kickthrough*
2. Travel over the movement window as seen in a Scorpion Switch
   a. *Set Loaded Beast, Left leg Front Kickthrough, Pop back to Right leg Scorpion Switch*

Further to this, you'll notice that more options have opened up with the Level 2 movements particularly as we're also including travels within our flows. Some Level 2 examples include:

a. *Right leg Front Kickthrough, Pop back to Left leg Scorpion Sweep*

b. *Right leg Front Kickthrough, Pop back to Left Lateral Traveling Ape V1, 1 rep*

c. *Right leg Front Kickthrough, Pop back to Right side Crocodile Roll*

d. *Right leg Front Kickthrough, Pop back to Crocodile*

→ Note that in this final example, the leg that was in a FKT position will be the closed side in Crocodile.

While the above examples all come from a Front Kickthrough position, keep in mind that "Pop Back" can also be used from a Side Kickthrough or Modified Crab position:

a. Right leg Side Kickthrough, Pop back to Loaded Beast

→ This indicates that we are treating the SKT as though it were a FKT and the Loaded beast will therefore be directly backwards from the direction of the kicking leg.

b. Right leg Full Scorpion, Pop back to Loaded Beast

→ As above, we are treating the straight leg in the Modified Crab as though it were a Front kickthrough leg and therefore will jump directly backwards to get to Loaded Beast.

COMBINING AND MODIFYING MOVEMENTS: TO/INTO

The correct use of "to" and/or "into" can be one of the more confusing components to master from the entire Call Out language. Recall from L1 that In Animal Flow, we use the terms "to" and "into" interchangeably. The two rules introduced in L1 will be added to in L2 as the options for fluid transfers between movements has increased.

The THREE scenarios where TO or INTO should be used

1. **When we are ending somewhere other than where we would normally end a movement in order to create a seamless transfer between the two**.

   For example:

   "Left leg Jumping Underswitch INTO right leg Side Kickthrough"

   "Left leg Underswitch TO Forward Traveling Bear"

   "Right leg Roll Through TO Crab"

2. **When we are eliminating something to create a more fluid transfer between two movements**. In L2 this often lends itself to creating an energy roll by removing heel breaks or a hand drop.

   For example:

   "Right leg Underswitch Tap TO Left Arm Crab Reach, Return to Crab INTO Right leg Underswitch"

   "Left Leg Scorpion Sweep INTO Right leg Reaching Underswitch"

   "Right leg Underswitch TO Ape TO Left leg Reaching Underswitch"

   "Left Side Crocodile Roll TO Pop Out"

3. **Transitioning through the end point of a movement in order to get to another movement fluidly**. In this scenario, the initial movement is either not completed and/or the energy moves through the end point without stopping, effectively turning itself into the next movement. This use of to/into is unique and only applicable to specific transitions and serves to replace "Open the Gap" and "Close the Gap" when utilized with crocodile rolls.

For example:

> *"Right leg Beast Reach INTO Front Step"*. This call out indicates that we do not fully finish the beast reach but rather pass through the end point and directly into the front step as we release the head.
>
> *"Right side Crocodile Roll INTO Right leg Full Scorpion"*. The use of "into" replaces the need to end the Crocodile roll, call out "Open the Gap" then call out the full scorpion.
>
> *"Left Leg Roll Through INTO Right side Crocodile Roll*". The use of "into" here replaces the need to end the Crocodile Roll, call out "Close the Gap" then call out the Roll Through.
>
> *"Right leg Reaching US INTO Right side Crocodile Roll"*. As above, this indicates that instead of landing in Crab, the traveling leg will extend through the window on a 45 and close the gap to go directly into the crocodile roll.

When NOT to use TO or INTO

You should never call out TO or INTO after a regular movement. It's common for new Animal Flow instructors use these words when they're not necessary.

The following example is INCORRECT:

> *"Left Leg Underswitch TO Right Leg Underswitch INTO Right Leg Underswitch Tap, TO Right Leg Full Scorpion" (incorrect)*

None of these movements need a TO or INTO between them, as they are all stand-alone movements. The correct way to call this out would be simply:

> *"Left leg Underswitch, right leg Underswitch, right leg Underswitch Tap, right leg Full Scorpion" (correct)*

ADDITIONAL LEVEL 2 LANGUAGE

Side:

- Side is used exclusively for Crocodile Rolls and Pop Outs to indicate that we are moving towards the same side as the extended leg.

Close & Open the Gap:

- From a Modified Crab position, Close the Gap is used to indicate we are sliding the extended leg's heel to bring the knee into contact with the base ankle and simultaneously dropping the hand from guard position.
- From the end of a Crocodile Roll, Open the Gap is used to indicate that we are sliding the extended leg out to a 45-degree angle and lifting the opposite hand into guard position.

Pop Switch:

- From a Crocodile Roll position, Pop Switch is used to indicate we are quickly hopping (Pop) to extend the opposite leg forward.

Leap To:

- Leap To is used when hands and feet are both leaving the ground to travel forward from a bilateral base, Ape or Frog.

CALLING OUT TRAVELING FORMS

The traveling forms in L1 were primarily utilized to establish coordination, conditioning, and endurance within the bases all of which are qualities that helped develop the capacity for flow. They were, however, intentionally mechanical to aid in developing the necessary foundation. In L2 we begin to integrate traveling forms as switches and transitions within our flows: Incorporating traveling forms in this way serves to add variability in height, direction, and options for fluid transfers. The rules for calling out travels are as follows:

1. **Bilateral Traveling Forms:**

DIRECTION > COMMAND > REPETITIONS

"Right Lateral Traveling Ape Low Hip, 1 rep"

- Bilateral includes all Lateral Traveling Ape Variations and Forward Traveling Ape.
- We only call out **one repetition** within a L2 Test Out flow unless the second repetition is becoming something else.

- You can use "Version 1, 2, or 3" in your call out or chose to use the descriptive terminology of "Low hip, high hip, or reach".

2. **Contralateral Travels:**

COMMAND > STRIDES*

"Left leg Underswitch into Traveling Leopard, two strides"

- Contralateral includes Beast, Bear, Crab, Crocodile Crawl, and Leopard
- We can call out a maximum of **3 strides** within a L2 test out flow. You are also not required to do 3 and can instead choose to perform 1 or 2.
- *Direction will need to include either "forward" or "reverse" depending on the type of travel being used. "Right" or "Left" may not be necessary in accordance with the details listed below.
- If we are starting from a neutral position, we must specify which limb is leading the travel:

"Set Beast, Forward Traveling Beast, 1 stride, left hand leads"

- *Stride is only necessary if you choose to travel within that form. It is possible to transition into an animal form and then directly out of it without completing additional strides.

  "Set Crab, Right leg Underswitch to Bear"

  This assumes the limbs will be squared off in Bear.

- If we are within a flow and rotating into a contralateral travel stride (such as forward traveling Bear vs Bear), we assume that the Call Out leg in motion will be the lead striding leg.

  "Set Crab, Right leg Underswitch to Forward Traveling Bear".

  This results in the Right foot and Left hand being in the lead within the stride position.

- If you are transitioning into a Crocodile position, the traveling arm will always tuck under the base leg, meaning the Call Out leg will extend behind you.

  "Set Crab, Left leg Underswitch to Crocodile"

  The right arm will tuck under the right leg as the left arm and leg extend outwards.

- If you are transitioning into a Crocodile Crawl position, the traveling leg with tuck forward beside the base arm as though you've just completed a stride.

  "Set Crab, Left leg Underswitch to Crocodile Crawl"

  The left side of the body will be "closed" and the right side will be extended.

WRITING FLOWS

As with Level 1, you can write out your fows using abbreviations for each movement. Below you'll find the key for both the L1 and L2 movements.

Traveling Forms (TF)	FTB	Forward Traveling Beast
	RTB	Reverse Traveling Beast
	LTB	Lateral Traveling Beast
	FTC	Forward Traveling Crab
	RTC	Reverse Traveling Crab
	FTF	Forward Traveling Frog
	FTA	Forward Traveling Ape
	LTA1	Lateral Traveling Ape 1: Low Hip
	LTA2	Lateral Traveling Ape 2: High Hip
	LTA3	Lateral Traveling Ape 3: Reaching
	FTBr	Forward Traveling Bear
	FTL	Forward Traveling Leopard
	CC	Crocodile Crawl
Form Specific Stretches (FSS)	LBU	Loaded Beast Unload
	WU	Wave Unload
	BR	Beast Reach
	AR	Ape Reach
	CR	Crab Reach
	SR	Scorpion Reach
	LB	Loaded Beast*
Switches and Transitions (S&T)	US	Underswitch
	USTap	Underswitch Tap
	JUS	Jumping Underswitch
	SKT	Side Kickthrough
	J-SKT	Jumping Side Kickthrough**
	L-SKT	Levitating Side Kickthrough**
	FS	Full Scorpion
	SS	Scorpion Switch
	FStep	Front Step
	FST	Front Step Through
	FKT	Front Kickthrough
	RUS	Reaching Underswitch
	US-A	Underswitch to Deep Ape
	SSweep	Scorpion Sweep
	CrocR	Crocodile Roll
	RT	Roll Through
	PO	Pop Out

HOW TO WRITE OUT A FLOW

Within all flows, we utilize punctuation to denote how to transition between each movement as well as where one movement ends and another begins.

We use the Call Out Formula in our written Flows, too, so all you need to remember is: DIRECTION > LIMB > COMMAND, or, in the case of Jumping or Levitating Side Kickthroughs, ACTION > DIRECTION > LIMB > COMMAND.

For example:

L L SKT = Left Leg Side Kickthrough

Here are a few guidelines to follow when writing out your Flows.

- Always start with the base position, writing the name in full. For instance, if you'd say "Set Crab", then you'd write "Crab"
- Use commas between each call out, unless it's a combination
- For combinations, use a dash in place of the words TO or INTO, for example:

  "Left leg Underswitch TO Loaded Beast" would be written as "*L L US – LB*"

  "Leap TO Right leg Front Kickthrough" would be written as "Lp – RL FKT"
- You would also use a dash to represent the command "Return To" after a FSS
- When returning to a position after a FSS, write out the full name of the position you are returning to, for example: "Right arm Crab Reach, return to Crab" would be written as "*R A CR – Crab*"

Symbol	Call Out/Command
, (comma)	No command, it is a regular transition after a movement is complete
- (dash)	To/Into
- LB/Crab/Ape	Return to Loaded Beast or Crab or Ape
J-	Jump To
L-	Levitate To
PB-	Pop Back To
Sl-	Slide To
Lp	Leap To

Example 1:

Crab, L L US, R L US, L L JUS - R L SKT

Translates to:

Set Crab
Left leg Underswitch
Right leg Underswitch
Left leg Jumping Underswitch TO right leg Side Kickthrough

Example 2:

Beast, R L SS, L L RT-L S CrocR
Translates to:
Set Beast
Right leg Scorpion Switch
Left leg Roll Through to Left Side Crocodile Roll

Example 3:

Crab, R L USTap-SKT, R L US-A, L L SSweep-R L RUS
Translates to:
Set Crab
Right leg Underswitch Tap to Side Kickthrough
Right leg Underswitch to Ape
Left Leg Scorpion Sweep to Right leg Reaching Underswitch

SAMPLE FLOWS

As discussed in both L1 and L2, Flow is the ultimate integration of the benefits and objectives of the S&T and FSS components, Over the following pages, we've shared some sample flows as well as a go-to resource that you can use to map and explore the endless movement combinations that are possible in Animal Flow.

The first Flows- the Kinetic Flow- includes the full Call Out in the column on the left and the abbreviated written Flow in the column on the right. For the remaining sample Flows, we've left the written Flow column blank so that you can practice the skill of writing out Flows according to the abbreviation key chart.

THE KINETIC FLOW- Small Space	
Call Out	**Written Flow**
Set Ape Right leg Reaching Underswitch Left leg Underswitch TO Ape Left Lateral Traveling Ape, Low Hip, One rep Left leg Scorpion Sweep into Right leg Reaching Underswitch to Right side Crocodile Roll to Left leg Roll Through to Left side Crocodile Roll to Pop Out Repeat, starting with a left leg Reaching Underswitch	Ape, R L RUS, L L US-A, L LTA1 1, L L SSweep – R L RUS – R S CrocR – L L RT – L S CrocR - PO

THE KINETIC FLOW- Larger Space	
Call Out	**Written Flow**
Set Ape Right leg Reaching Underswitch Left leg Underswitch TO Ape Left Lateral Traveling Ape, Low Hip (1 rep) Right leg Scorpion Sweep into Left leg Reaching Underswitch to Left side Crocodile Roll to Right leg Roll Through to Right side Crocodile Roll to Pop Out Repeat, starting with a left leg Reaching Underswitch	Ape, R L RUS, L L US-A, L LTA1 1, R L SSweep – L L RUS – L S CrocR – R L RT – R S CrocR - PO

FLOW 1	Call Out	Written Flow
	Set Ape Right Leg Reaching Underswitch Left leg Jumping Underswitch Left leg Full Scorpion Right leg Underswitch to Ape to Right Lateral Traveling Ape Low hip (1 rep) to Right leg Reaching Underswitch to Right side Crocodile Roll to Pop Out	

FLOW 2	Call Out	Written Flow
	Set Crab, Left leg Jumping Underswitch to Right leg Side Kickthrough, Right leg Full Scorpion, Right leg Roll Through to Right side Crocodile Roll to Right leg Underswitch to Ape, Left leg Scorpion Sweep to Right leg Reaching Underswitch, Left leg Underswitch Tap, Left leg Underswitch to Right leg Scorpion Sweep	

FLOW 3	Call Out	Written Flow
	Set Loaded Beast, Wave Unload, Return to Loaded Beast, Right leg Underswitch, Left leg Full Scorpion, Right leg Underswitch to Forward Traveling Bear (2 strides), Left leg Underswitch to Right leg Roll Through Right leg Underswitch to Ape Reach, Open, Left leg Reaching Underswitch , Right leg Jumping Underswitch to Left leg Scorpion Sweep, Left LTA2 1 rep, Left leg Reaching Underswitch to Left side Crocodile Roll to Pop Out	

FLOW	Call Out	Written Flow
4	Set Beast, Right leg Side Kickthrough, Jump to Left leg Front Kickthrough Left side Crocodile Roll to Left leg Full Scorpion, Right leg Jumping Underswitch to Right Arm Crab Reach, Return to Crab to Left leg Underswitch to Right leg Scorpion Sweep, Left leg Scorpion Sweep to Right leg Reaching Underswitch to Left leg Roll Through, Jump to Left leg Side Kickthrough, Levitate to Right leg Side Kickthrough, Right leg Underswitch to Forward Traveling Bear, Left leg Underswitch Tap	

CHAPTER 5

PRACTICE & PROGRAMMING

INCORPORATING YOUR LEVEL 2 PRACTICE

Now that you've completed the workshop, you have a ton of new information to add to your existing foundation. How do you integrate it into your practice?

DRILL THE BASICS

The best way to start integrating your new AF movements is to drill them. It's common for all students who've completed a course to want to focus only on the Flows, or other parts they particularly like. While there's nothing wrong with focusing on the movements that make us feel good, it's still important to always be drilling ALL of the movements individually.

Even if it's only for a rep or two, by practicing all of the movements you'll be keeping the patterns fresh in your system. This is inclusive of your Level 1 movements!

HAND BALANCING

One of the most important skill elements we focus on in Level 2 is Hand Balancing. How do you get better at Hand Balancing? Practice Hand Balancing! With that said, there are some considerations that apply to any Hand Balance practice:

- Approach your Tuck Balance practice as a discipline. Set aside time 2-3X/week to practice conditioning drills and make it a point to stay consistent in an effort to gain the requisite ranges and adapt tissues to the demand.
- Keep your tuck balance separate from your regular workout or training regime. It is particularly helpful to perform it when your body and brain are as fresh as possible (read: away from all other types of training).
- If you do decide to combine it with your other training, be sure to train your Hand Balancing first. Hand Balance practice doesn't go well when we're already fatigued!
- Rather than focusing on always hitting the same sets and reps, focus on your body's performance and feedback. Tuck Balance progress is rarely linear and by listening to your body's feedback you'll be better able to know when to progress.
- On static conditioning exercises, try to increase the time under tension with perfect form to a maximum of two-minute holds.
- On skill-based exercises, try to increase the reps with perfect form.

SAMPLE WARM UP FOR A FLOW PRACTICE DAY

Here's an example of the warm-up Mike performs every single time he practices AF:

1. **Wrist Mobs:** Go through each Wrist Mob and any additional wrist and hand preparation activities that you have in your toolbox.
2. **Activations:** Perform both Beast and Crab Activations. Perform at least two sets each for max. time (with perfect technique).
3. **Form Specific Stretches:** Perform the Form Specific Stretch Flow, going through the entire flow twice.
4. **Traveling Forms:** Try to hit a few repetitions of each variation of each animal.

   Ape – Lateral Ape versions 1,2,3, and Forward Traveling Ape/Frog

   Beast – Forward, Reverse, Lateral

   Crab – Forward, Reverse

   Bear- Forward

   Leopard- Forward

   Crocodile Crawl- Forward
5. **Switches & Transitions:** Go through each S&T from each category, even if it's for just a couple of reps. Call out to yourself either out loud or in your head.

   Underswitch

   Underswitch Tap

   Jumping Underswitch

   Reaching Underswitch

   Underswitch to Deep Ape

   Side Kickthrough

   Jumping Side Kickthrough

   Levitating Side Kickthrough

   Scorpion Switch

   Full Scorpion

   Roll Through

   Front Step

Front Step Through

Crocodile Roll

Scorpion Sweep

6. **Flow:** Perform the Kinetic Flow to both sides. Begin with the right leg as you did in the workshop, and then repeat the entire thing, starting with the left leg. Be sure to call out for yourself, performing as many sets as you'd like.
7. **Free Flow or Practice:** Here you can decide how you want to spend the rest of your flow session. You could focus on free flow, design a flow, tempo and energy work, practice something that you're not strong at, or practice the things you really like. You'll likely want to spend time on the things you love most, but remember that to be a well-rounded Flowist, you'll need to maintain both L1 and l2 movements.
8. **Cool Down:** Finish your practice with wrist mobilizations.

SAMPLE WARM UP FOR A CONDITIONING PHASE DAY

Here's an example of the warm-up Mike performs to prepare for Hand Balancing during the Conditioning Phases:

1. **Wrist Mobs:** Go through each Wrist Mob and any additional wrist and hand preparation activities that you have in your toolbox.
2. **Activations:** Perform both Beast and Crab Activations. Perform at least two sets each for max. time (with perfect technique).
3. **Wrist & Lat Stretches:** 2 minutes each with or without positional isometrics
4. **Prone Swimmers:** 3-5 slow repetitions
5. **Protraction, Retraction, Depression, Elevation (Floor pike or Pike 90):** 30 seconds in each position with 2-3 total sets.
6. **Practice your Treshold:** Use Floor Pike, Pike 90, or Wall supported tucks to train your threshold, always leaving enough energy to exit safely. Rest and repeat for a total of 4-6 sets.

   Consult page 39 to 49 in your manual for conditioning vs skill selection.
7. **Practice your Skill:** Select the most accessible Skill exercise for your current capacity and perform 2-4 best attempt repetitions for 1-2 sets.
8. **Cool Down**: Finish your practice with additional wrist mobilizations.

SAMPLE WARM UP FOR A SKILL PHASE DAY

Here's an example of the warm-up Mike performs to prepare for Hand Balancing:

1. **Wrist Mobs:** Go through each Wrist Mob and any additional wrist and hand preparation activities that you have in your toolbox.
2. **Activations:** Perform both Beast and Crab Activations. Perform at least two sets each for max. time (with perfect technique).
3. **Wrist & Lat Stretches:** 2 minutes each with or without positional isometrics
4. **Prone Swimmers:** 3-5 slow repetitions
5. **Protraction, Retraction, Depression, Elevation (Floor pike or Pike 90):** 30 seconds in each position with 2-3 total sets.
6. **Practice your Skill:** Use one or two of the skill exercises for your practice. You may vary which ones you select on each training day but will want to focus on one or two variations at a time. Perform 2-4 best attempt repetitions at a time for a total of 2-5 sets based on your success.

   Consult page 39 to 49 in your manual for conditioning vs skill selection.
7. **Condition:** Select a conditioning exercise to train your threshold. Hold for 1-2minutes max and repeat for 5-8 sets.
8. **Cool Down**: Finish your practice with additional wrist mobilizations.

For a successful practice:

- Never train angry or frustrated.
- If performance drops during Skill attempts, take more rest time. If it continues to drop, move on to conditioning.

APPENDICES

CERTIFICATION TEST OUT INSTRUCTIONS

Much like your Level 1 Test out, you will need to complete a video submission in order to become a Level 2 Certified Animal Flow Instructor. You will need to demonstrate that you have retained your Level 1 techniques while integrating your Level 2 movements and principles within a choreographed flow. Additionally, you are required to demonstrate your ability to execute a tuck balance and coach Level 2 movements to a client.

There will be three sections of the Test Out. Each should be submitted in its own video.

- **Video 1:** Performing a 3-minute flow
- **Video 2:** Tuck Balance Repetitions
- **Video 3:** Teach a client ***three*** L2 movements

VIDEO 1: YOUR FLOW

Your flow should meet the following criteria:

1. Be at least 3 minutes long
2. Successfully integrate and perform a Tuck Balance for ONE second within your flow. Keep the tuck balance under 5 seconds so as not to take up too much time and in order to keep your flow moving. If you are still inconsistent with your tuck, be sure to attempt to hit the tuck towards the start of your flow instead of leaving it towards the middle or end.
3. You must include ALL of the Switches & Transitions from L1 and L2 as per the following Level 1 & Level 2 lists:

L1 Form Specific Stretches

Loaded Beast - Unload

Wave Unload

Beast Reach

Ape Reach

Crab Reach

Scorpion Reach

L1 Switches and Transitions

Underswitch

Underswitch Tap

Jumping Underswitch

Scorpion Switch

Full Scorpion

Side Kickthrough Category

Front Kickthrough Category

L2 Switches & Transitions
Reaching Underswitch
Underswitch to Deep Ape
Crocodile Roll
Pop Out
Roll through
Scorpion Sweep
Tuck Balance

L1 & L2 Traveling Forms
Forward & Reverse Beast
Forward & Reverse Crab
Lateral Apes V1, V2, V3
Forward Ape
Leopard
Crocodile Crawl
Bear

All Level 2 movements at some stage within your flow should start and end as they are taught in the workshop: For example, a Roll Through should start in Modified Crab and end in Modified Crab with the hand turned inwards rather than ending in Ape or Crab.

4. Over the course of a 3-minute flow, you will need to repeat movements which is completely fine though, much like Level 1, we do not want to see movements mirrored side to side.
5. Perform ALL of the Traveling Forms from Level 2: Bear, Crocodile, Leopard. You may also use any of the travels from Level 1. All travels should be used as a transition, limiting your Quadrupedal forms to 3 strides and your Bilateral forms to 1 Repetition.
6. Do *NOT* include any movements from the OnDemand Bonus tutorials or Level 3.
7. Demonstrate that you have a solid understanding of tempo changes, energy rolls, redirects and breaks. We want to see constant but various motion throughout the entire flow.
8. If you set your flow to music, please wear earbuds when recording your test out: YouTube may block it or mute the sound if you video with music in the background. If you upload copyrighted music to our YouTube channel, we get in trouble. Don't get us in trouble.

VIDEO 2: TUCK BALANCE

Submit a video of yourself attempting 3-6 repetitions of your tuck balance from either Lateral Traveling Ape V2 or Levitating SKT.

Your tuck balance repetitions should meet the following criteria:

1. Show a controlled entry from either LTA2 or Levitating SKT and a controlled landing passing through High Hip Modified Beast.

2. Your tuck can be held for a minimum of 1 and a maximum of 5 seconds on any given repetition. We want to see your most successful efforts and if they have variable durations, that is ok!
3. It must utilize one of the four acceptable leg positions:
    a. Legs Together and knees below hip line.
    b. Legs Apart (straddle) and knees below hip line
    c. Legs Together and knees at hip line
    d. Legs Apart and knees at hip line
4. Every effort must be made to have an open shoulder line of 180 degrees.

VIDEO 3: TEACHING & COACHING

Submit a video of yourself teaching and coaching THREE of the L2 moves to someone else.

1. Teach the movements to someone who is already familiar with Animal Flow i.e a client you've already been working with.
2. Take no more than THREE minutes to teach each movement from start to finish. Your video should be an unedited 3-minute video rather than clips amounting to a total of 3 minutes.
3. From start to finish, 3 minutes should give you enough time to:
    a. Introduce
    b. Explain the Language
    c. Demonstrate
    d. Observe
    e. Coach/Give Feedback
    f. Achieve relative success

Be sure not to move on until you feel comfortable with their performance of the movement. If you find that it is taking more than the allotted 3 minutes, stop the recording and spend some additional time helping them through the process and then record again.

**You cannot use a fellow instructor who is already familiar with the techniques as this does not allow us to give you accurate feedback on your coaching skills.*

SUBMITTING YOUR VIDEOS

1. **DUE DATES**

   You should submit your THREE videos between 30 – 90 days after the workshop.

   - Do NOT submit it earlier than 30 days. We believe you need at least that much time to practice the moves.
   - You may need more than 90 days depending on where you are within your Tuck Balance journey. If this is the case, please email certifications@animalflow.com to request an extension before the 90 day mark.
   - If you have an injury or some reason you can't complete your videos within 90 days, you can also request an extension by emailing us at Certifications@AnimalFlow.com.

2. **Video Formats:** You should submit THREE videos. One for Section 1 (Your Flow), one for Section 2 (Coaching the Movements), and a third for Section 3 (Tuck Balance). DO NOT send us 5 separate videos.
3. **Video Quality:** The videos do not need to be very high quality though we do need to see you clearly.
   1. Shooting on a cell phone is fine in a HORIZONTAL format.
   2. You DO NOT have to include labels, or graphics, or anything fancy.
   3. Please make sure we can HEAR you in the coaching section. Avoid shooting in loud gyms, places with a lot of background noise, or with loud music.
4. **Music:** DO NOT use music in your videos.
   - You are encouraged to choreograph to a song but will need to use earbuds for recording your flow.
   - We want to hear you coaching in your second video and music makes that hard.
   - In any of the 3 videos, if you upload a video that includes copyrighted music to YouTube, YouTube may block it or mute the sound. If you upload copyrighted music to our YouTube channel, we get in trouble.

5. **Uploading:** Upload your videos to YouTube or another streaming service (Vimeo, etc.). Do NOT send us videos as email attachments that have to be downloaded, including via WeTransfer or Google Drive. We will not accept videos that we have to download to watch. If you don't have a YouTube or other type of video channel, you can upload to our channel (instructions below).
    - When you upload to YouTube, make sure the video is set to UNLISTED. Do NOT set it to "private" or to "public." If it is private, we cannot see it and your video grading will be delayed. If it is public, anyone can see the moves and we will ask you to take the video down.
    - If you don't have your own video streaming account, email us and we will send you a dropbox link to upload.

REFERENCES

Augustsson J, Esko A, Thomee R, Svantesson U. Weight training of the thigh muscles using closed vs open kinetic chain exercises: A comparison of performance enhancement. Journal of Orthopedic Sports Physical Therapy 1998: Vol 27 (1):3-8

Brindle TJ, Nyland J, Ford K, Coppola A, Shapiro R. Electromyographic comparison of standard and modified closed-chain isometric knee extension exercises. Journal of Strength and Conditioning Research 2006; Vol 16 (1) 129-43

Brown, Kyle. 2011. "Using Whole Body Multi-Planar Exercises for Baseline Conditioning." NSCA's Performance Training Journal. 10(1): 6-7. www.nsca-lift.org

Burton, Lee and Gray Cook. The Importance of Primitive Movement Patterns. www.performbetter.com

Buxton JD, Prins PJ, Miller MG, Moreno A, Welton GL, Atwell AD, Talampas TR, Elsey GE. "The Effects of a Novel Quadrupedal Movement Training Program on Functional Movement, Range of Motion, Muscular Strength, and Endurance." Journal of Strength Cond Res. 2020 Oct 5. PMID: 33021583.

Cogley RM, Archambault TA, Fibeger JF, Koverman MM, Youdas JW, Hollman JH. 2005. "Comparison of muscle activation using various hand positions during the push-up exercise." Journal of Strength and Conditioning Research. Aug 2005: 19(3): 628-33.

DuCane, John. The Five Animal Frolics: A Complete QiGong Program for High Energy, Vitality and Well Being. Dragon Door Publications. St. Paul, MN.

García-Massó X, Colado JC, González LM, Salvá P, Alves J, Tella V, Triplett NT. 2011. "Myoelectric activation and kinetics of different plyometric push-up exercises." Journal of Strength and Conditioning Research. July 2011: Vol 25(7) 2040-7.

Guertin, Pierre A. 2013. "Central pattern generator for locomotion: anatomical, physiological, and pathophysiological considerations." *Frontiers in neurology* vol. 3 183. 8 Feb. 2013, doi:10.3389/fneur.2012.00183

Gouvali MK, and K. Boudolos. 2005. "Dynamic and electromyographical analysis in variants of push-up exercise." Journal of Strength and Conditioning Research. Feb 2005: Vol 19(1) 146-51.

Harman, EA; Gutekunst, DJ; Frykman, PN; Nindl, BC; Alemany, JA; Mello, RP; Sharp, and A. Marilyn. 2008. "Effects of Two Different Eight-Week Training Programs on Military Physical Performance." Journal of Strength and Conditioning Research. March 2008 Vol 22 (2): 524-534.

Lesondak David. 2017. Fascia: What it is and why it matters. Handspring Publishing, Scotland

Liebenson, C. 2004. The relationship of the sacroiliac joint, stabilization musculature, and lumbo-pelvic instability. Journal of Bodywork and Movement Therapies. Vol 8: 43-45.

Myers, Thomas. 2001. Anatomy Trains: Myofascial Meridians for Manual and Movement Therapists. Churchill Livingston, China.

National Academy of Sports Medicine (NASM). 2012. Essentials of Personal Fitness Training" 4th Edition. (Editors Micheal A. Clark, Scott C. Lucett, Brian G. Sutton) Lippincott Williams & Wilkins: Baltimore, MD Chapter 15 Pg 379

National Academy of Sport Medicine (NASM). 2014. Essentials of Corrective Exercise. Jones and Bartlett Learning: Burlington, MA.

Nigmatullina Y, Hellyer PJ., Nachev P, Sharp DJ, and Seemungal BM. 2013. "The Neuroanatomical Correlates of Training-Related Perceptuo-Reflex Uncoupling in Dancers." Cerebral Cortex February 2015;25:554–562 doi:10.1093/cercor/bht266
Advance Access publication September 26, 2013

Patrick S, Noah JA, and Yang, JF., 2009. Interlimb Coordination in Human Crawling Reveals Similarities in Development and Neural Control with Quadrupeds. Journal of Neurophysiology 2009 101:2, 603-613.

Pool-Goudzwaard, A., A Vleeming, C. Stoeckart, CJ Snilders, and M.A. Mens. 1998. Insufficient lumbopelvicstability: a clinical, anatomical and biomechanical approach to "a-specific" low back pain. Manual Therapy Vol 3: 12-20.

Puddle, Damien L. and Peter S. Maulder. 2013. "Ground reaction forces and loading rates associated with Parkour and traditional drop landing techniques." Journal of Sports Science and Medicine. Vol 12: 122-129.

Quelch, Frasier. 2007. "Benefits of Multi-Planar Training: The Planar Training Method." The IDEA Fitness Journal. Vol 4(6). http://www.ideafit.com/fitness-library/planar-training-method.

Shinkle J, Nesser TW, Demchak TJ, McMannus DM. 2012. "Effect of core strength on the measure of power in the extremities." Journal of Strength and Conditioning Research. Feb 2012: Vol 26 (2) 373-80.

Suprak DN, Dawes J, Stephenson MD. 2011. The effect of position on the percentage of body mass supported during traditional and modified push-up variants Journal of Strength and Conditioning Research Feb 2011: Vol 25(2):497-503.

Sylos-Labini, Francesca et al. 2014. "Locomotor-like leg movements evoked by rhythmic arm movements in humans." *PloS one* vol. 9,3 e90775. 7 Mar. 2014, doi:10.1371/journal.pone.0090775

Zehr, E P et al. "Neuromechanical interactions between the limbs during human locomotion: an evolutionary perspective with translation to rehabilitation." *Experimental brain research* vol. 234,11 (2016): 3059-3081. doi:10.1007/s00221-016-4715-4

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